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ABSTRACT

This guide lays out the pedagogical and theoretical foundations of a culturally inclusive, vertical basic skills curriculum for adults testing at the 0-8 grade levels. Chapter 1 discusses the basis for the development of this curriculum: a sound basic skills adult curriculum is built upon a psychosocial examination of individual learners in relationship to the immediate and larger society in which they live and the effect of this relationship on the formation of their social identity and intellectual and academic development. Chapter 2 discusses factors that affect learning in diverse populations and then addresses the family life and traditions of specific ethnic groups of adult learners and their relationship to education. Chapter 3 presents a theoretical framework for cultural inclusiveness and relevance. The multicultural education model is highlighted. Chapter 4 discusses pedagogical practice. The four-part lessons described are designed to encourage creative expressiveness, critical thinking, and multicultural interaction. Chapter 5 offers approaches to teaching language, mathematics, and cultural studies. Chapter 6 contains a listing of generative themes that can be used to organize instructional lessons and the more specific course outlines for language and reading courses designed to encompass an expanded core curriculum. Appendixes include three bibliographies: 147 items on theory and pedagogy, 36 items on diversity and learning, and 130 items on multicultural mathematics teaching. (YLB)

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BASIC SKILLS CURRICULUM FOR CULTURAL INCLUSIVENESS AND RELEVANCE

1990-1991

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INTRODUCTION

During the 1986-87 academic year the Milwaukee Area Technical College (MATC) began a process of revising and modifying its basic skills assessment and its basic skills instructional delivery system. A Basic Skills Task Force composed of faculty, students, and community representatives met for well over 14 months and submitted a report to the MATC Administration.

BASIC SKILLS TASK FORCE REPORT

The report of the Task Force contained various policy and procedural recommendations which would later serve as an operational framework for the improvement of MATC's basic skills delivery systems. It also recommended the adoption by the MATC Board of a new Mission and Goals of the MATC Basic Skills Program.[1] This new mission takes a novel approach to the task of facilitating the educational growth of adult learners.

The report also gave stimulus to the development of a new basic skills curriculum by calling for the development of a "vertical" curriculum: one where instruction proceeds sequentially from the lowest level course in each subject area to the highest level course, while ensuring that students achieved basic academic competencies and a holistic sense of the socio-economic-cultural context in which these skills are used, before moving on to the next course or level of instruction. Members of the Task Force also emphasized the importance of a curriculum consistent with the research literature in adult education and effective in meeting the educational needs of MATC's culturally and linguistically diversed adult learner population.

The Task Force's recommendations on curriculum were generally adopted by the MATC Administration. During the summer and fall of 1988 a team of faculty members was assigned to work on the development of a core basic skills curriculum in the areas of Reading, English, and Math for students performing between the 4th and 8th grade levels in these subject content areas.[2] A curriculum guide was developed containing a delineation of philosophical goals, objectives, course outlines and lesson plans for each of the core subject areas. Each component of the curriculum guide rests upon four pedagogical/philosophical goals: the development of critical thinking, the acquisition of self-directed learning strategies, the development of social awareness, and the

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[1]The Mission Statement is appended to this introduction. The Basic Skills Task Force felt it was important to disseminate it as a statement of assurances that the college would remain committed to the need to provide literacy and other basic skills instructional services.

[2]This document will use "grade levels" only as indicators of potential academic deficiencies. The authors recognize the imprecise nature of this measure when measuring the educational needs of adults. We are aware of the fact that "grade levels," because they are generally normed with children, are not adequate measures of the academic deficiencies of adults.

acquisition of expanded knowledge of careers and occupational opportunities. The new curriculum was piloted during 1989-90. Currently it is being implemented across the MATC district after being infused with culturally-based content specific to ethnic/racial groups within the Milwaukee area, and expanded and modified to also include instruction in science, social studies, college survival skills, and occupational/career exploration.

Another recommendation of the Basic Skills Task Force established that after 1988 all MATC basic skills instruction below the 4th grade level was to take place at local community sites and MATC delegate agencies. To this end, MATC sought funding to expand its services througout its network of delegate agencies and community-based organizations, as well as within its network of workplace literacy sites. Currently (1991), instruction is offered below the 6th grade level in more than 25 community locations. In some of these sites instruction in GED preparation is also offered. Basic skills instruction from the 6th to the 12th grade level is also offered in close to 15 workplace literacy sites.

To ensure a quality delivery at the outreach sites, an adult basic education curriculum for individuals performing below the 4th grade level in Reading, English, Math, and Science needed to be developed. In 1989 a committee of faculty members and representatives of Community-Based Organizations (CBOs) began working on the development of a vertical curriculum for students performing below the 4th grade level. Like the 4-8 curriculum guide, the new curriculum focused on developing critical thinking skills, self-directed learning skills, social awareness, and career/occupational awareness. Additional emphasis was placed on developing students' self-esteem, a positive identification with their language and cultural background, and on the development of students' native language skills (so that such skills can be used by students to facilitate their future acquisition of English language proficiency).

CULTURALLY INCLUSIVE CURRICULUM DEVELOPMENT

During the Summer of 1990, another faculty and staff committee continued the enhancement of the 0-4 grade level curriculum. The Curriculum Committee then decided that more culturally inclusive activities needed to be build into the 0-8 grade level curriculum and that the two curriculum guides (i.e., 0-4 and the 4-8 grade level documents) should be merged into one curriculum guide. This was done via the development of the present document, which lays-out the pedagogical and theoretical foundations of a culturally inclusive and non-remedial basic skills curriculum and which is supported by a supplementary document containing culturally relevant lesson plans and other supplementary material.

This revision to the Basic Skills Curriculum for Cultural Inclusiveness and Relevance contains some theoretical postulations on the variables that affect the acquisition of basic skills by adult learners who are members of ethnic/racial groups; it

recommends activities and course outlines which can be use by any instructor; and it makes the case for a liberating pedagogy that draws from a well documented knowledge-base on socially rejected and economically disadvantaged and oppressed groups in U.S. society today. The lesson plans contained in the supplementary document titled Lesson Plans for Cultural Inclusiveness follow these pedagogical and theoretical perspectives. The activities presented in this document are also informed by pedagogical and social assumptions that mirror a culturally diversed and multilingual society, as opposed to a society that pretends to assimilate or turn its members into WASP-type Americans.

I would be remiss if I didn't acknowledge, again, the hard work and commitment of the faculty and staff that helped to conceptualize and developed this curriculum guide and the supplementary lesson plans. A list of the principal actors in this process is provided with the document. I feel especially indebted to Ms. Evonne Carter, for coordinating the work of the Curriculum Committee, and to Eva Mack, for her research, writing, and editing assistance and for the many hours she labored to get the document completed for duplication. My personal gratitute to both.

Tony Baez, Associate Dean
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April 1991

MISSION AND GOALS OF THE BASIC SKILLS PROGRAM

Mission

The Milwaukee Area Technical College (MATC) is a publicly supported comprehensive postsecondary educational institution commitsed to increasing the potential and productivity of the people in its district through the delivery of high quality instruction and programs. As indicated in the Institution's MIssion Statesment, MATC will provide

> *...developmental education in basic skills as may be necessary for effective participation in occupational training and employment, as well as for participation in further higher education.*

Through its Mission, MATC is further committed to maintaining

> *...an institutional climate which promotes student welfare; which facilitates and encourages learning and multicultural understanding; where both students and staff value high quality education; where the composition of the student and staff population is representative of the residents of the district.*

We concur with the above and further reiterate the belief that it has been and should be a commitment of MATC to provide the opportunity for adults to exercise their right to learn, and to acquire the basic skills necessary to function effectively in society.

MATC students vary in the academic skills they possess. Yet, no matter what their basic skill levels, they have accumulated a wealth of knowledge, experience and insight that the institution must recognize and build upon to facilitate their becoming active participants and change agents in the world around them. Student empowerment comprises not only their attainment of those rudimentary, agreed-upon skills that are requisite for further education or entry into the labor market, but should also include the cultivation of habits of inquiry, intellectual skepticiism, and self-directed learning. A program of basic skills, then, is to be rooted in the experience students bring to the educational transaction.

Definition

BASIC SKILLS means those competencies in reading, writing, language,mathematics, critical thinking and life skills needed to function effectively in society. Basic Skills includes the ability to process information, both written and oral, to derive meaning from it, and to apply it to specific tasks.

Goals

The primary goals of the basic skills programs at MATC are to:

1. Prepare student for entry into various occupational programs.

2. Prepare students for participation in further higher education.

3. Prepare students to attain or retain meaningful employment.

4. Encourage students to become self-directed and life-long learners.

Guiding Principles

1. Students needing basic skills instruction will be identified through assessment and then counseled for placement in the appropriate basic skills program.

2. The various basic skills programs will be coordinated and there will be specific transition points established by the faculty and administrators for those programs.

3. MATC will monitor the academic progress of basic skills students.

4. Where feasable, opportunities will be provided for students to be enrolled in an occupational program while upgrading their basic skills.

5. There will be ongoing coordination between basic skills, and the degree and diploma programs.

6. MATC will provide appropriate support services for basic skills students.

7. MATC will appoint/assign basic skills staffa nd faculty who are sensitive to the educational needs and the cultural background of its students.

8. MATC will provide opportunities for ongoing professional development of basic skills faculty and staff.

WHY SHOULD WE BECOME LITERATE?
TESTAMENT TO THE WISDOM OF LEARNERS *

What kind of people are we?
We are poor; very poor
but we are not stupid.
That is why, despite our
illiteracy, we still exist.
But we have to know why we
should become literate.

We joined the literacy
classes before, but after
some time, we got wise.
We felt cheated. So we left
the classes.

Do you know what we found
out?
The Babus take up this work
in their own interest.
Maybe the election is around
the corner
or perhaps there is a
government grant
or something which must be
utilized.

What they taught us was
useless. To sign one's name
means nothing.

We agree to join the classes
if you teach us how not to
depend on others any more.

We should be able to read
simple books,
keep our accounts, write a
letter and read and
understand newspapers.

One more thing...
Why do our teachers feel so
superior?
They behave as if we are
ignorant fools,
as if we are little children.

Please do understand that
the teacher may know things
which we don't.
But we know a lot of things
which are beyond him.

We are not empty pitchers.
We have minds of our own.
We can reason out things,
and, believe it or not,
we also have dignity.

Let those who teach us
remember this.
Treat us like adults.
Behave with us as friends.

And yet, something more.
We don't get a square meal.
We have few clothes.
We don't have a proper
shelter. And to top it all,
floods come and wash away
everything.

Then comes a long spell of
drought drying up everything.
Would it help if we become
literate?

Can literacy help us live
a little better? Starve
a little less? Would it
guarantee that the mother
and the daughter won't have
to share the same sari
between them? Would it
fetch us a newly-thatched
roof over our heads?

Literacy should help us live
better, at least we look at it
that way.

They say that things are
being planned for us --the
poor: Would literacy help us
in knowing those government
plans?

Would it help us know how
to raise our yield, and
increase our income?
And from there, could we
borrow money in easy terms,
and what benefits would we
get from the cooperatives?
Would we get better seeds,
fertilizer and all the water we
need? Would we get proper
wages?
And this we think is learning
for living?

They say that the new
program promises things like
this. But, is it only writing
on a scrap of paper?
Is it like one of those very
many past promises that were
never kept?

Will this program teach us
how to think and work
together? Will "doing" be
made a part of "learning?"
If all this is done, all of us
will join the literacy classes.

It will then be learning
to live a better life.

We are weak and are ill very
often. Will the program
teach us how to take care of
our health and become
strong? If it does,
then we shall all come.

They say that there are laws
to protect and benefit us. We
don't know these laws.
We are kept in the dark.
Would literacy help us know
these laws? Would we know
the laws that have changed
the status of women? And
the laws that protect the
tribals among us? We want a
straight answer.

Then we shall decide whether
we should become literate or
not. But if we find out that
we are being duped again
with empty promises, we will
stay away from you. We will
say, "For God's sake, leave us
alone."

*** This poem was written by a group of poor and illiterate people in West Bengal, India and adopted as a statement for literacy workers at the International Seminar on Literacy in Industrialized Countries held in Toronto, Canada, 1987. It was included in Convergence, "Literacy in Industrialized Countries," part 4, 1987.**

CHAPTER 1

CLASS, CULTURE, AND THE ADULT LEARNER

In developing this new curriculum for adult learners with lower level basic skills, we must preface all discussion herein with the assertion that educational marginality is the result of social and economic marginality and not, as is popularly held, the cause of it. We also postulate that a sound basic skills adult curriculum is built upon a psycho-social examination of the individual learner in relationship to the immediate and larger society in which he/she lives and the effect of this relationship on the formation of his/her social identity and intellectual and academic development.

We --all of us-- develop attitudes, skills and behaviors as a result of the context in which we are born and raised and as a result of how we experience formative events. This context is our culture: the psycho-social setting where we acquire language, learn its rules and social purposes, develop core values and begin to define ourselves as both individuals and group members. Our **cultural identity** is derived from our experiences within our family, neighborhood and ethnic/cultural group. These experiences develop our self-image, and inform our sense of belongingness, ultimately impacting our internalized range of personal choices by defining for us the meaning of freedom and describing for us how it is to be attained.

Our **ethnic/social identity** is formed as we interact as individuals with the larger, "dominant" culture. From this interaction we learn how and whether we are valued by that culture, how we must behave within it, and what challenges face us as we negotiate with that larger social sphere.

Cultural group identity is surmised as we come to understand the role of our cultural group within society as a whole. A society such as ours, which includes within it many different and diverse cultural groups, must look carefully at the relationship between these groups and what we will call the dominant or "mainstream" culture.[1]

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[1]These concepts originate from the article, "Literacy and Cultural Identity" by Bernardo M. Ferdman, Harvard Educational Review, Vol. 60, No. 2, May 1990.

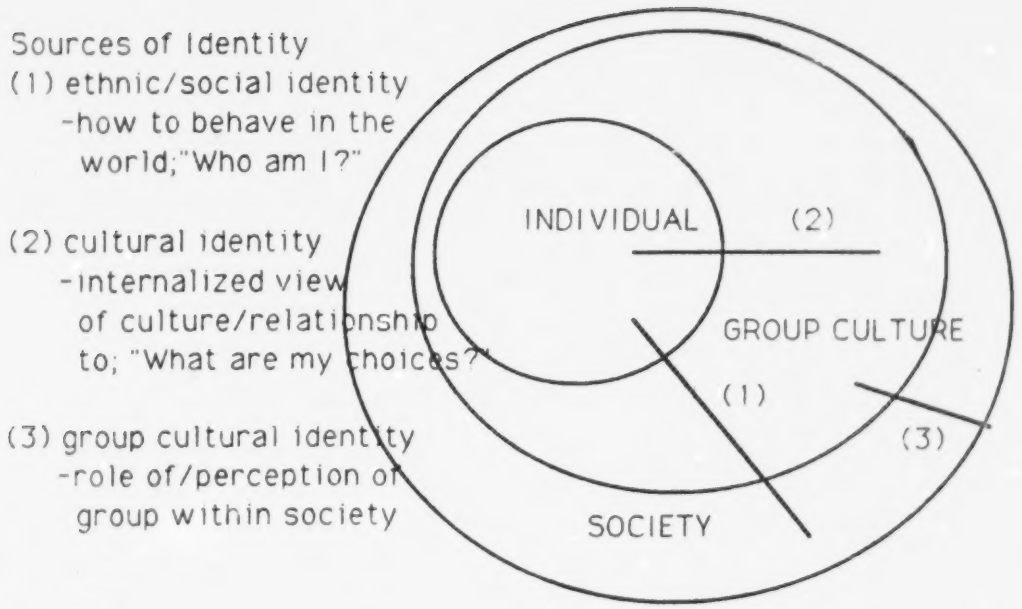

figure 1.

Given the known positive correlation between positive self-identity and high self-esteem formation to academic success,[2] educators are particularly compelled to examine this psycho-social/cultural dynamic as it affects both affective and cognitive behavior.

As in most societies, American mainstream values represent the values of the market place; in the United States these translate to individual freedom and competition. These values, which tend to be implicitly at odds with the core values of many cultural groups within our society, set the philosophical foundation for acculturationist and assimilationist models of learning: those that seek to subsume these diverse populations

[2]Patrick Shannon in "Reading and Social Class," Language Arts, Vol. 62, No. 6, October 1985.

into, and at the service of the mainstream.[3] Ethnic/racial group members who are psychologically adversely affected by educationally acculturationist models often express their resistance by refusing to participate in educational "opportunities" as developed for them by mainstream institutions. They may blame themselves[4] or blame the "system," but in either case they are set aside because of their linguistic, class and cultural/racial origin. As such they are marginalized economically and socially.

These are realities not lost on the men and women of whom we speak. While education is touted as the means towards inclusion, the evidence, to date, shows that this may be only so but for a small proportion of those ethnic/racial groups generally viewed as a social burden to the society. Currently, this is most evident among the children of ethnic/racial groups such as Blacks, Hispanics, Native Americans, and American Indians. For example,

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[3]Sociologist Milton Gordon, in his classic Assimilation in American Life: The Role of Race, Religion, and National Origins (New York: Oxford University Press, 1964), has argued that the assimilation of ethnic/racial groups into the mainstream of American society may be a desirable goal, if in fact it leads to the attainment of equity of participation and decision-making, and if those "assimilated" equally participate in the economic activities of the host society. Gordon offers a framework for the understanding of the assimilation process. He shows that any group entering a new society goes through two stages before it can be said that it has totally been assimilated: (1) acculturation, or the process by which the immigrant or minority group learns or acquires the cultural traits of the host society (language and certain values, behaviors and practices), and (2) structural integration, the process by which the immigrant or minority group begins to participate in equal footing with everyone else in the economic activities of the host society (i.e., they fully participate in policy-making bodies, in defining the future of the society, and they equally draw from its resources, etc.). Based on his analysis, it can be concluded that in the United States there are large ethnic/racial groups that have not been assimilated (in spite of the rhetoric embraced in the notion of a U.S. "melting pot"). These groups tend to be minorities of "color" --such as are Blacks and Hispanic subgroups. They may have achieved degrees of acculturation, but have not been allowed "structural" and economic integration. Thus, acculturationist and assimilationist models of education operate on a pretense of good will. They purport only to acculturate by negating ethnic/racial groups their culture and language, while the dominant society continues to deny these groups and equal participation in the economy.

[4]Victoria Anne Steinitz and Ellen Rachel Solomon in Starting Out: Class and Community in the Lives of Working Class Youth. Philadelphia, Temple University Press: 1986.

The National Assessment of Educational Progress reports reveal that most school children stay in the economic class of their origin and that this is particularly true for non-middle class, non-white, non-English speaking children.[5]

Educational revisionists, such as Colin Greer go further and suggest that there never has been a serious intent to enfranchise racial minorities via the public schools. In The Great School Legend,[6] he argues that

> To white immigrants, the schools held out the promise of eventual social mobility. But there was no pretense of seriously offering mobility to the blacks. The society had decreed the economic marginality of blacks. Their proper fate was to remain a reserve labor force .... The public schools might encourage them to carry, to cook, and to clean - but there was no greater promise of full economic citizenship such as was advertised by the schools for the white immigrants. The schools agreed to carry out the mandate set by the economy.

Our schools, whose stated purpose is to prepare children for the market place, are institutions representative of the mainstream;[7] they and the curricula they deliver (which Greer and many others have argued are developed on economic premises, and James Paul Gee has suggested inaccurately view literacy's ability to mitigate economic and social constraints[8]) are a principal means to social acculturization. But there is yet no serious commitment to a positive integration of ethnic/racial groups into the economics structures of the society. At a time when entry into these structures is conditioned on ones ability to acquire certificates of various levels of successful school completion (e.g., high school, college, and other diplomas), educational institutions continue to fail and to marginalized the poor and working class, and language and ethnic/racial minority students.

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[5]I. L. Kirsch and A. Jungeblut in Literacy:Profiles of America's Young Adults, Final Report (Report No. 16-PL-01). Princeton, National Assessment of Educational Progress: 1986._

[6]Colin Greer in The Great School Legend. New York, Penguin Books: 1979.

[7]Henry A. Giroux in "Critical Literacy and Student Experience: Donald Graves' Approach to Literacy," Language Arts, Vol. 64, No. 2, February 1987.

[8]James Paul Gee in "The Legacies of Literacy: From Plato to Freire through Harvey Graff," Harvard Educational Review, Vol. 58, No.2, May 1988.

Another prominent feature of traditional educational systems has been to domesticate. Students are taught to obey and passively accept the information teachers want them to learn without questioning its validity or importance in terms of their own experience (they have been asked to leave their realities at the schoolhouse door and accept as real the promise of education as the route to mobility). In this context, educational institutions have failed to provide students with knowledge and skills that they can use to first examine, then analyze and finally change their reality.[9]

The interface between economic marginality and social exclusion forms the individuals' view of him- or her-self vis a vis the mainstream, and thus one's ethnic/racial/social identity. Educational institutions fail to educate socially excluded groups when they deny or silence the expression of this dynamic.

Greer is not alone in his assertions relative to the role played by the public schools in the miseducation of ethnic/racial groups. Others have also apply a similar analysis to higher educational institutions. Not only are ethnic/racial minorities neglected by the public schools. Later as adults, when they choose to re-enter the educational system, again they become the victims of institutions not inclined to facilitate their empowerment.

This document asserts that literacy is an essential step towards inclusion in the social and economic life of the larger society. In that respect, we follow much the same rationale espoused by UNESCO at the U.N. International Conference of 1968:

> To try to understand in order to try to choose and to determine what one wants, one must first be able to read... and this is true despite the proliferation and propagation of images - and incidentally we do not realize sufficiently to what extent those images refer to ideas which cannot be handled with precision without the written word. Isolation from the world, and therefore isolation in the world, solitude, darkness, impotence, without command of any means of finding a place in accordance with one's own ideas in the environment, of choosing one's own work, of defending one's own rights, or ordering one's own needs and, a fortiori, of influencing by deliberate choice the changes taking place in that environment ...

However, today we also know that literacy is not universally embraced by all cultural groups where oral tradition is rich and literacy may function to set individuals apart from the group which

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[9]**Paulo Freire in Pedagogy of the Oppressed. New York, Continuum Publishing Corporation: 1982.**

sustains them.[10] This predisposition is reinforced when education for literacy is attempted and "failure" results. At this point the individual, rather than function "incompetently" by mainstream standards, reasserts his/her membership in peer groups which do not value literacy or which value the individual and his/her contributions in spite of his/her lack of skills. When, as a result, large groups of people choose to devalue the educational process and skills rather than be devalued as people, a competing value system is set into motion and education is viewed as that which disconnects one from peers and familial relationships from which the individual, as all individuals must, derives self-worth.[11]

Adult Basic Education teachers find in their classrooms the most persevering of the undereducated youth of yesterday. As we begin teaching, we must be fully cognizant of the cognitive legacy of their miseducation, the cultural dissonance which led to their not having acquired basic skills in the first place, and of other economic and social factors which continue to contribute to the tenuousness of their educational endeavors.

Thistlewaite, speaking of how reduced self confidence affects attention to learning, which in turn affects practice at learning, explains that the lack of earlier motivation may have hindered the development of the ability to establish learning sets, to concentrate, and to retrieve material from memory.[12]

Norman and Malicky add to this discussion by stating that:

> ...educationally disadvantaged learner's impaired view of reading seems to grow with the impaired view of self... One fact,...which is obvious with regard to adults at low levels of literacy development, is that they are print deprived and literally not part of the literate culture around them. They seldom have clear notions regarding <u>why</u> people read and generally view reading as a <u>decoding task.</u>[13]

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[10]**Arlene Fingeret in "Social Network: A Perspective on Independence and Illiterate Adults," Adult Education Quarterly, <u>Vol. 33, No. 3, Spring 1983.</u>**

[11]**Victoria Seitz in <u>Social Class and Ethnic Group Differences in Learning,</u> International Reading Association, 1977.**

[12]**Linda Thistlewaite in "The Adult Disabled Learner - An Independent Learner?", <u>Lifelong Learning,</u> November 1983.**

[13]**Charles Norman and Grace Malicky in "Literacy as a Social Phenomenon: Implications for Instruction," <u>Lifelong Learning,</u> May 1986.**

These psycho-social/cultural and cognitive behaviors are no strangers to teachers of adult basic skills. We find the result of our local (city) failure to address these properly in statistical data collected by this college: One in every seven students entering MATC reads below the 7th grade level; 67% of minority students attempting entry into the occupational programs of the college cannot do so because they are performing below the 10th grade level; about 50% of students enrolling in Adult Basic Education courses are high school graduates; only 54% of minority students, as opposed to 75% of white students, complete their courses every semester; and only 21% of black males graduate from their occupational program of choice.

Locally collected statistics on the public schools are also telling of this. The 1985 study by the Governor's Commission on the Quality of Education in the Greater Milwaukee Area[14] and the Milwaukee Urban League's 1987 study, Milwaukee Today-A Racial Gap, both report the continuance of educational neglect in Milwaukee's inner-city schools. Generally, these reports found that

> Hispanics' average GPA (on a 4 point scale) was between 1.40 and 1.67, and for Blacks it was between 1.38 and 1.46. In some academic areas (e.g. math and science) the average GPA for Blacks at the high school level was below 1.0.
>
> School completion rates (over a 4 year high school attendance period) for the 1985-86 school year were as follows: 46% for Blacks; 49% for Hispanics; and 62% for Whites.
>
> There are elementary and secondary schools in the city of Milwaukee where as few as 14% of minority students score at or above the national norm in achievement tests. Generally, and on the aggregate in Milwaukee, less than 30% of Hispanics and blacks, scored above national norms on standardized tests.
>
> Only 2 of 15 high schools in the city of Milwaukee had an average GPA above 2.0 (on a 4 point scale).
>
> In many Milwaukee high schools, less that 12% of minority students were enrolled in advanced level math and science courses.

These figures have not changed in any significant way. Public school reports for 1990 reveal almost no progress from the statistics stated in these two reports.

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[14]**This is the most comprehensive report available to date on the quality of education in Milwaukee area schools. Data was compiled on 200 schools, over 60,000 students, close to 6,000 teachers, 200 principals, and close to 5,000 parents. The report is available from the State Department of Public Instruction.**

The challenge before adult basic skills teachers is therefore spelled out. Namely, to construct an educational environment and curricula, supported by instructional activities and materials which make a clear break with a past that has failed so many. To these ends, this multicultural literacy curriculum has been designed. As we proceed to look at how our efforts towards classroom effectiveness and pluralism must differ from the impaired acculturationist-deficit model, let us be clear about the scope of our challenge with the help of Henry A. Giroux:

> .... it is not enough for teachers to merely dignify the grounds on which students learn to speak, imagine and give meaning to their world. This is important but it is also crucial for teachers to understand how schools, as part of the wider dominant culture often function to marginalize, disconfirm and delegitimate the experiences, histories, and categories that students use in mediating their lives. This means understanding how texts, classroom relations, teacher talk and other aspects of the formal and hidden curricula of schooling often function to actively silence students." [15]

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[15]Henry A. Giroux in "Critical Literacy and Student Experience: Donald Graves' Approach to Literacy," Language Arts, Vol. 64, No. 2, February 1987.

CHAPTER 2

FACTORS AFFECTING LEARNING IN DIVERSED POPULATIONS

> "I cannot deny what I am, what I have in me, that the rest do not have."
>
> "I do have my own space in this world and this space along with other spaces forms the totality of our society."[16]

Ethnicity

The statements above express identity. The first speaks of a self which is distinct from others; it acknowledges and values that which is individually different. The second suggests that individual variations which are both idiocynratic and culturally-based contribute to diversity within society.

Ethnic identity informs our view of and relationship with society, a point central to sociologist Manning Marable's writings on the subject of race and ethnicity[17]. He argues for a clear distinction between **race**, an unscientific categorization based on external (physical) characteristics, and **ethnicity**, from which selfhood and belongingness are derived. As a construct which is imposed on people and brought to life in the ideology of racism, race, argues Marable, is not a source of identity, but oppression.

Joan Moore, examining the development of Hispanic identity in the United States[18], suggests that while ethnicity is usually derived from nationality (i.e. the experience of individuals in the particular cultural, historical and linguistic context of their separate nations of origin), a group ethnic identity is adopted by groups of people representing different nations or national sub-groups when interacting with the larger cultural/ social context.

As an example, people who, in general terms, share Spanish heritage and language refer to themselves in group terms as

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[16]these quotations, the thoughts of three educators, Paulo Freire, Magdalena Freire and Alma Flor Ada as expressed in a video taped dialogue on critical pedagogy made in Sao Paulo, Brazil in 1989.

[17]see Manning Marable, "The Rhetoric of Racial Harmony," in Sojourners, August-September 1990.

[18]see Joan Moore, "Hispanic/Latino: Imposed Label or Real Identity," in Latino Studies Journal, May 1980.

Hispanic or Latino. Yet, beyond these commonalities lie many differences derived from their more specific national origin, e.g. Chicano, Cuban, Colombian, Puerto Rican, Mexican, Argentinean. These differences which are significant among Hispanic people for the purpose of establishing national/ethnic identity, are overridden in power relationships, when they either act or are perceived as a group.

Havighurst, in the conclusion to his study on the role of social class and ethnicity in human development[19], asserts that social class (defined by social and economic indicators) is the other "ecological structure that produces diversity in human life style and development."

In this document references to "ethnicity" are within the definition provided above by Joan Moore. Due to our limitations as well as the need to operationalize important demarcating characteristics of learners, we will look at them in terms of their membership in ethnic groups e.g. American Indian instead of Cherokee, Sioux, Oneida; Asian in place of Lao, Hmong, Vietnamese. However, as necessary, we attribute to a specific subgroups characteristics that are specific to them.

Variations in Knowledge Acquisition

Having clarified terminology, intent must also be clarified. The object of this supplementary document is to provide teachers with information which will help them to identify and correct (to the extent that any individual is able) for the dissonance that exists between traditional school settings and individuals.

"By planning lessons with style in mind, teachers give the majority .. a better chance," reports educational psychologist Bernice McCarthy.[20] "Style" then is but another way of saying that people vary in the way they acquire knowledge, and cultural differences, as will be shown throughout this chapter, significantly contribute to how people learn.

"Teaching to style," writes Carol Marshall in Educational Leadership, "represents a philosophical change from tradition to a mutual embrace of accountability. If students don't learn the way we teach them, then we will teach them the way they learn." To accomplish this teachers must often "stretch" their teaching style; to manage in future academic endeavors students will have to learn

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[19]see, Havighurst, Robert J. (1976). The relative importance of social class and ethnicity in human development, Human Development, 19, 56-64.

[20]see John O'Neil, "Making Sense of Style," in Educational Leadership, Aug-Sept. 1990.

to "stretch" their learning styles. In this light, says Marshall, "we must teach them how they learn so that they can teach themselves."[21]

Background information on the four major ethnic groups most represented among adult learners at MATC, i.e., American Indian, Hispanic, African-American and Asians, is provided in the following pages. It is our aim to briefly describe historical, linguistic and cultural considerations which may affect how learning takes place among adult learners from these ethnic/racial backgrounds within the mainstream educational and economic systems of the U.S.[22] In this way we hope to shed some light not only on what has been called "learning style" but on learners' views of the opportunities and obstacles which are set before them.

This is particularly relevant because of the "schooling penalty" which Blair speaks of in Ogbu's Caste, Minority Status and Education: "... in a society with a dual system of social mobility, the same level of education does not necessarily possess equal value in both systems of social mobility."[23] Ogbu also suggests that the ability to assimilate and succeed in a foreign culture is dependent on one's positive relationship to an identity with one's culture of origin. This insight helps to explain why, in spite of extreme racial prejudice some ethnic groups, e.g. Chinese and Jews, have been able to "move into" U.S. society, while others, most notably African-Americans and certain Hispanic subgroups (e.g., Mexicans and Puerto Ricans) continue to experience life in the U.S. from the vantage point of a servant and economically marginalized class. The loss of an "identity" also helps to explain the low self-esteem and consequent socio-economic immobility found among poor and working class people of European descent.

Teaching for Learning: Empowering the Learner

Jim Cummins, a prominent researcher in the field of language acquisition, has argue that U.S. public school systems have the

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[21]see Carol Marshall, "The Power of the Learning Styles Philosophy," Educational Leadership, October 1990.

[22]We caution the reader not to look for full inclusion of the many issues associated with knowledge acquisition among ethnic/racial groups in U.S. society. It is our purpose to pose just a few observations suggestive of how important it is to take into consideration cultural and socio-historical influences in the teacher-learner relationships.

[23]The dual system of mobility refers to contest mobility, where the individual competes for positions of promotion, and sponsored mobility, where individuals rely on another to help them move into higher positions.

power to either "disable" or "empower" students.[24] He suggests that traditional forms of teaching, along with racially discriminatory beliefs and practices (manifested in educational institutions as "compensatory education"), help to disable minority students in alarming numbers (see Figure 1, page).

Cummins has also suggested that an interactive/experiential model should inform teaching. This model could draw from the research findings in language and knowledge acquisition so as to create an interrelation between language and learning, creation and expression, reading and writing. Since speaking and writing are the **active** parts of language, he posits that those are the main means of learning. The characteristics of this model would be:

-genuine dialogue between student and teacher in both oral and written modalities

-guidance and facilitation, rather than control of student learning by the teacher

-encouragement of meaningful language use by students, rather than correcting surface forms

-conscious integration of language use and development with all curricular content, rather than teaching language and other content as isolated subjects

-focus on developing higher level cognitive skills, rather than factual recall

-task presentation that generates intrinsic rather than extrinsic motivation.

In other words, this model proposes a methodology that would empower students with a positive sense of themselves and origins, and would foster their discovery of identity and potential. Once they are able to lay claim to themselves as whole and capable human beings they will learn how to name and alter their realities.

Interactive Learning

Interactive learning is a cornerstone of culturally inclusive teaching, and is particularly adaptive for the groups with which this document is concerned. The classroom should be set up in a way so that students can work together in small cooperative teams. Students can benefit from this structure which encourages personal achievement, social development and ethnic interrelations. This set-up is strongly recommended for minority students whose culture

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[24]In Jim Cummins' 1988 report Empowering Minority Students.

emphasizes group activity and interdependence. Minority students' efforts to learn can be assisted by transforming the classroom structure from a competitive, individualistic and autocratic (teacher-centered) environment into one which is supportive, cooperative, additive (building on students' strengths and experiences rather than some standardized set of skills/knowledge), and democratic. Some suggested guidelines follow:

-keep a relaxed and happy environment (learning is a process of coming to value and apply knowledge not a tension-filled one driven only by the acquisition of isolated skills)

-students should play an active part in electing the themes of the curriculum; relevance and interest insures attention and retention

-students should act as facilitators from time to time and let the instructor be a participant

-promote dialogue

-guide students to learn how to listen to others for clarification of information and points of view.

-provide multi-sensory learning experiences including opportunities for performance

-make sure that discussions end with participants involved in applying new information/knowledge to understanding and transforming their reality

-different cultural groups and language should be reflected in the curriculum

-students from the same ethnic group should be able to communicate in their language during activities

-classrooms should display multilingual signs and posters

-school newsletters and official announcements should reflect the different languages of the school community

-students should be encouraged to write amd be published in their language

-students should have access to instruction in their own language as well as bilingual instruction in content areas.

-community representatives should be invited to speak to students as models and mediators (resource people) with the community at large

-students should be exposed to a variety and a sufficient amount of information, materials and resources representative of their own culture.

Using Oral Language

Understanding the oral language and oral-to-written language tradition (a common characteristic among certain ethnic/racial groups) is very important to an empowering pedagogy. Generally, this means that learning is more effective when concepts being taught are presented orally and critically discussed to develop students' knowledge base and thinking skills.

Dr. Alma Flor Ada developed an approach called Creative Reading which is highly influenced by Paulo Freire's methodology[25]. She suggests the following four phases in the development of language and reading skills:

1) Descriptive phase: the recognition of the content or issue depicted in the discussion, picture or written words.

2) Interpretive phase: the contrast between the content or issue and the student's own experiences. This phase can produce, for minority students, an additional benefit of having their life experiences validated in an academic setting.

3) Critical/Cross-cultural phase: this phase helps students to form educated judgments regarding the content or issue at hand.

4) Creative phase: having extracted the content/issue, contrasted it to their own experiences and analyzed it critically from a multicultural perspective, the students should be prompted to consider how these new aptitudes and attitudes can effect their reality as an individual and/or group member.

Again, in order to emulate the kinds of alternative models presented by Dr. Ada and others, teachers need to recognize and understand the particularities of students' cultural and language backgrounds as they affect learning.

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[25]Dr. Alma Flor Ada, "Creative Reading: A new approach to teaching ethnic minority students to read." 1980.

Recognizing Relational Style

Learning styles are individual as well as culturally derived. The research of Stodolsky and Lesser[26] looked at abilities across cultures and suggested that ethnic groups differ between themselves in terms of kinds of ability not degrees of intelligence. As they explain:

> We accept the definition of intelligence which postulates diverse mental abilities and proposes that intelligent behavior can be manifested in a variety of forms, with each individual displaying certain areas of intellectual strength and other forms of intellectual weakness. A basic premise of this study is that social-class and ethnic influences differ not only in degree but in kind, with the consequence that different kinds of intellectual skills are fostered or hindered in different environments.

In another study by Rosalie Cohen[27] two styles of learning were identified and termed as "relational" and "analytical." These "ways of knowing", postulates the researcher, are developed through socialization within families and friendship groups and correlate with upbringing: "formal" v. "shared-function" families, respectively.[28] Because of the dominant role of White-europeans in the shaping of American education (both, the k-12 and college level), the model adopted and rewarded is the analytical cognitive style. Therefore, learners associated with a relational style will be considered poor learners and may consequently become poor achievers. Discussing differences between learners in the k-12 system, Cohen reports that these are

> so great that a child... is unlikely to be rewarded socially with grades regardless of his native ability, the depth of his information, or his background of experience. In fact he will probably be considered deviant and disruptive in the analytically oriented learning environment of the school.

On tests of ability, high intelligence, high relational students actually were found by Cohen to score the worst of all because

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[26]see Stodolsky, S & Lesser, G. (1976). Learning patterns in the disadvantaged. Harvard Educational Review 37, 546-93.

[27]see Cohen, R. (1969). Conceptual styles, culture conflict and non-verbal tests of intelligence, American Anthropologist, 71, 828-56.

[28]For a summary of all this research see, Hale-Benson, J. (1982). Black children: Their roots, culture and learning styles. Baltimore: Johns Hopkins Press.

their ability to reach higher levels of abstraction through relational pathways takes them farther away from the higher levels of abstraction reached through analytical pathways.

By contrast, when presented with concrete demands, "with intelligence held constant, high-relational pupils can compete with analytic ones."

An Invitation

In sum, this document is an invitation to get to know our students in new ways, to see potential in a different light, to experiment with other ways to help them meet this potential. It is our hope that teachers will understand that generalizations which are presented do not always hold at an individual level and that individuals may, if we do not miss the chance to be lead by them, help us to see larger truths.

Good Luck.

[A bibliography is included at the end of this document in order to guide your reading of primary sources.]

AFRICAN AMERICAN ADULT LEARNERS

As sociologist, Manning Marable, explains in a recent issue of Sojourners magazine (The Rhetoric of Racial Harmony, August-September 1990):

> The African American people are both an ethnic group (or more precisely a national minority) and a racial group. Our ethnicity is derived from the cultural synthesis of our African heritage and our experiences in American society, first as slaves and subsequently as sharecroppers, industrial laborers, the unemployed, and now as the core of the post-industrial urban underclass in the semi-destroyed central cities of North America.
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> As black scholar, W.E.B. DuBois observed nearly a century ago, black Americans are both African and American,"two souls, two thoughts, two unreconciled strivings; two warring ideals in one dark body, whose dogged strength alone keeps it from being torn assunder." This central duality is at the core of our ethnic consciousness, forming the fundamental matrix for all expressions of African American music, art, language patterns, folklore, religious rituals, belief systems, the structure of our families, and other culture manifestations and social institutions. Blackness in the cultural context is the expression and affirmation of a set of traditional values, beliefs, rituals and social patterns, rather than physical appearance or social class position.

The following chapter on African American learners will address this duality by first examining traditional and present-day African cultural/ value systems and their relationship to the education of children. We will then turn to look at how Africans' experiences as the objects of the slave trade and then as slave labor in the southern agricultural colonies of the United States, produced a group of African-American people - originating in, but distinct from, their ancestors.

African American Family Life and Tradition

In pre-colonial Africa children were taught without assignment to specific classroom groupings by teachers who functioned without administrative structures such as those with which we are familiar. The African system of education was a continuous process, flexible to the ages and needs of the African people.

Every ethnic/tribal group provided education which can be characterized in the following way:

1. There was great importance attached to it for its collective purpose and social nature.

2. It was highly integrated with the social life of the people, both in a material and spiritual sense.

3. Both the means and goals of instruction were varied.

4. It provided gradual and progressive opportunities for the child to succeed in terms of physical, emotional and mental development.

The purpose of education among all ethnic groups in Africa was clearly to be able to contribute to the family and tribe in the ways identified below by A. Babs Fafunwas:

1. To develop the child's latent physical skill

2. To develop ethical character

3. To inculcate respect for elders and those in positions of authority.

4. To develop intellectual skills

5. To acquire specific vocational training and develop healthy attitudes towards honest labor.

6. To develop a sense of belonging and to participate actively in family and community affairs.

7. To understand, appreciate and promote the cultural heritage of the community at large.

From the Gikuyu tribe in Kenya, Kenyatta shows how the goals and objectives were applied in the traditional, informal school system of that area. In this system, the functions of both teacher and student develop through stages and proceed from birth to death.

The child had to pass through various stages, according to their age and status. It was the parents' responsibility to see to their childrens' education in the ways of the family and clan; very small children were left to their mothers and nurses who began their education through the medium of lullabies. These songs contained the histories and traditions of their family and clan and, by rehearsing the lullabies daily, were easily assimilated, becoming their earliest "lessons," passed on in oral tradition.

Parents of African children followed an unwritten curriculum in educating their children as they introduced materials of varying degrees of difficulty at different stages of their development. The mother cared for the infant, becoming nurse and teacher as well.

In these roles she watched each stage of the physical and mental development of her child. If either parent was not present to observe a developmental step e.g.their child's first steps, utterance or new tooth, the observer presented a commemorative gift to them. From that moment a sense of kinship developed between the observer and the family; in this way the child grew up and learned among people who loved and cared for him/her.

Once a boy child was six or eight, the father assumed responsibility for his training. The mother took over her daughters' apprenticeship into womanhood. Parents demanded the blind obedience of their children, and guided them in their first contacts at tribal gatherings and at work: Fathers would bring their children to listen and observe as village elders made laws and adjudicated their enforcement; similarly, it was the father who would assign chores. Boys helped with the husbandry of the family's animals, while girls accompanied their mothers in fetching water, caring for younger children and maintaining the home.

Two principles were implicit:

-school and life are one

-the child belongs to the community at large; non-parents may correct, scold, advise, console and reward any child as well as nurture the physical and mental acuities requisite of adolescents.

Because the African educative system did not resemble European schools, European colonizers failed to recognize its existence.

Vocational Education in the traditional African society can be divided into three types:

1. Agricultural education including crop farming, fishing, veterinary science (animal care and rearing)

2. Trades and crafts including hunting, weaving (basket and clothing), carving (wood and bronze), sculpting, painting and decorating, carpentry, building, hair plaiting, dress making, soapmaking, dying **esusu** (banking), **di-oci** (winetapping) and rope making

3. Professions including medicine, priesthood, diving, **Amala** (administration and government), **oji-ofo** (village leadership), chiefs.

Contrary to popular belief, one's occupation was not always determined by the tribe to which one belonged, just as in tribal life parents do not choose wives or husbands for their children. In both matters they played advisory roles. Occupations then, are open; children had a choice even in inherited occupations; one

inherited an occupation from one's parents or other family member on the basis of either being first born or showing promise in that field.

American education has tampered with the traditional values (including that placed on education) of African Americans and has contributed to the creation of a "culture of resistance."

African-American Life and Education

As previously stated, African-Americans have historically not been identified by their ethnicity, but by their race - a factor which, Marable argues

> has no scientific validity as a meaningful biological or genetic concept..... Race, therefore, is not an abstract thing, but an unequal relationship between social aggregates, which is also historically specific. The subordinated racial group finds itself divorced from the levers of power and authority within the socioeconomic order. The oppressed racial group's labor power, its ability to produce commodities, is systematically exploited, chiefly through abnormally low wage rates. It denies ownership of the major means of production. It lacks full access to sources of capital and credit. The racial group's political status is marginal or peripheral, as full participation and legislative representation are blocked. ...dominant and subordinate racial categories are constantly reinforced in the behaviors and social expectations of all groups by the manipulation or social stereotypes and through the utilization of the legal system to carry out methods of coercion.

Race, based on phenological descriptors, and racism, which views a racial group as inherently inferior, has been used to justify the treatment of people of African descent including:

-entrapment and forced removal of Africans from Africa for use as slave labor

-destruction of families during the slave trade

-death of Reconstruction's democratic gains (including public education and government by and for Black Americans) at the hands of official and vigilante terrorists

-expropriation of Black owned land and skills (the first skilled tradesmen were of African descent)

-economic impoverishment, forcing many individuals and families to migrate to urban centers

-Jim Crow laws, separating public facilities on the basis of race

-revision of history to exclude the contribution of Black scholars, scientists, writers, artists and statespeople

-poll taxation and other forms of political disenfranchisement

-unequal access to employment, education and public services

"One of the keystones in white America's justification of its exploitation of black people," writes psychologists William Grier and Price Cobbs in their book, Black Rage[29], "is the assumption that black men are stupid. It is assumed that they cannot learn as much as a white man and therefore cannot assume positions of power and responsibility ... It is a vital piece of the American self-concept, for it has allowed the nation to grow fat off black men's labor and to bar them from even the meanest participation in the wealth they have produced." They continue: "In spite of the yammering of naive observers, education has never offered a significant solution to the black man's dilemma in America."

The value which has been traditionally placed on education in the African-American community must be understood in light of this reality. Because in the American Black experience the possibility of gainful employment, even with an education, has never been a guarantee, the drive towards education has been highly motivated by the intrinsic value of education as "something which no one can ever take away from you."

Since expression of their African heritage was denied under slavery and, eventually, all but lost, a new African American culture "grew up," with rural and urban variations of it. Externalized, this experience led to the development of distinct language, music and literature forms as well as social organizations revolving around church and work, whose explicit and implicit purposes were to resist the separation of families, acculturation, Jim Crow, Ku Klux Klan, poll tax, school segregation, employment discrimination, etc.

Internalized, racism robbed the people of their dignity, feelings of self worth, and pride. Traditional values have been altered as people individually respond to the imperative to survive in a hostile environment. In Caste, Minority Status and Education Ogbu discusses the existence of African Americans as tantamount to that of an internal caste whose identity is derived from their subjugated position as opposed to their cultural background. As such, they are forced into a defensive posture, giving rise to a "culture of resistance," which asserts differentness.

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[29]see W. Grier, Black Rage,. New York: Bantam. 1968.

Educational Implications

To facilitate the academic success of African American students, teachers must understand the historic social/educational context out of which they have come, as well as the barriers which have worked to prevent their academi progress.

According to statistics in Jawanza Kunjufu's Developing Positive Self Images and Discipline, 42% of all Black children seventeen years old cannot read beyond a sixth-grade reading level.

In many urban centers, the high school drop-out rate among Black students is as high as 49.6%. Black children are 17% of the schools' population, but make up 41% of the Educable Mentally Retarded students; 85% of whom are likely to be black male children.

In December 1988 the Milwaukee Sentinel ran an article, "Minority Females Drop-Out Over Poverty," which reported that:

> Financial pressure faced by young Black and Hispanic females is one of the main causes of high drop-out rates which ultimately prevent those women from improving their standard of living.

In this same article, Rafael Valdivieso of the national Hispanic Policy Development Project added that

> these statistics demonstrate the need to present students, especially those who are disadvantaged, with a variety of incentives and supports that actively encourage them to stay and do well in school. They must see that doing well in school will increase their opportunities in employment and higher education.

A June 21, 1989 Wall Street Journal article entitled "Boost Black Students the Old-Fashioned Way" considered the following harsh realities:

* According to the U.S. Census, in 1986 more than 1/3 of Black 16-18 year olds did not complete secondary school

* The National Assessment of Educational Progress reports that Black high school graduates attain literacy levels only slightly above those of white 8th graders.

* By the end of elementary school as many as half the minority children in Montgomery County, MD, are so far behind that they can't keep up with the mathematics curriculum.

* Between 1984 and 1986, Blacks were the only minority group whose enrollment in 4 year colleges decreased.

* In 1986, the Black male college enrollment had dropped from 4.3% to 3.5%. In addition, more Black males than females who grew up in neighborhoods rooted in poverty and unemployment find crime more appealing than school.

Language is the other strongly correlated variable in the educational success of the Black student who speaks Black English as his/her mother tongue. The difference between home language and school language can impact learners' ability to succeed in the school environment because:

(1) syntax, which is intuitively used by readers to predict story meaning, is different when found in Standard EWnglish school texts

(2) story grammar or discourse patterns typical of oral language are restructured in the written materials read and produced in the classroom

(3) Black English is regarded by most teachers not as an alternative language but as a sub-standard form of the language. Victoria Seitz speaks to this point in her 1977 article, Social Class and Ethnic Group Differences in Learning to Read:

> "Children who speak dialects other than black English (e.g. southern, Bostonian) often learn to read without difficulty. It is thus quite possible that social factors such as prejudice or teachers' lack of knowledge of the normal speech patterns of the child may play a much larger role than perceptual and intellectual factors such as grapheme-phoneme correspondence ... differences in pronunciation are widespread, but they usually cause little notice from teachers unless they happen to cross social group boundaries .... Such attitudes might possibly be altered if the speaker of standard English would attempt to learn the complex rules of grammar, pronunciation, and stress patterns of nonstandard speech. This task resembles that of learning a foreign language and is far more difficult than most speakers of standard English realize. In experiments of this nature, the efforts of urban black children in producing acceptable standard English have been markedly superior to the efforts of middle-class white children in producing acceptable nonstandard English
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> ... It presently seems likely that social and motivational aspects of dialect usage are more potent sources of interference than any purely cognitive

problems of mismatch of written and spoken language."[30]

In order to teach and retain African American students teachers must consider all of the above as well as the following summary of other attributes of African derived socio-cultural and educative values that can be identified in the African-American culture of today:

- a tendency to respond to things in terms of their whole instead of their parts;

- a tendency to approximate space, numbers and time rather than stick to accuracy.

- a tendency to prefer to focus on people and their activities rather than on things; choice of occupations are often in the "helping professions."

- a tendency to prefer novelty, freedom and personal distinctiveness as exhibited in improvisation in music, dress and hairstyle.

- a tendency to not be written-word dependent. Proficiency in non-verbal ability is equated with intelligence; verbal ability is often demonstrated through story-telling and the use of idiomatic expression; history is largely passed down by oral tradition.

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VIETNAMESE, LAOTIAN, HMONG AND CAMBODIAN ADULT LEARNERS

Indochina is a group of nations geographically situated on a peninsula to the south of China and to the east of Burma. The people of Vietnam, Cambodia, Laos, Thailand and Burma are all considered Indochinese.

Because there is plenty of fish in the rivers and the land is fertile, the region is often referred to as the "land of fish and rice." The weather is warm, and rainfall is sufficient for farming. While these countries share a common diet, geography and climate, they are also quite different from each other in terms of cultural and religious practices.

The single greatest bond between Indochinese people living in the United States is their experience with historic colonialism and the wars that affected them during the middle decades of this century. The Vietnamese War, in particular, left deep psychological

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[30]see Victoria Seitz, Social Class and Ethnic Group Differences in Learning to Read, International Reading Association, 1977.

scars on everyone involved, whether as combatant or civilian.

The first wave of Indochinese refugees came to the United States in 1957. This was a small migration of Vietnamese who were educated, had some exposure to Western ideology and culture and had either worked for or been affiliated with the U.S. government; they were evacuated and airlifted after the Communist victory in Hanoi. They left for fear of persecution, many with only a moment's notice oftentimes leaving families behind. It was a time of unrest, separation, anxiety and fear. Before passage to the U.S. could be arranged, many waited in camps.

The second wave of refugees arrived between 1976 and 1984, after the fall of Saigon. This group included not only Vietnamese, but also Cambodians, Laotians and Hmong who left their homelands in the concluding years of the war.

In 1978 the United Nations Commission for Refugees met in Geneva to discuss Indochinese resettlement in various countries of the world. Some countries, offered permanent resettlement; these were the U.S., China, France, Canada and Australia. Some countries offered financial assistance. The Volunteer Resettlement Agencies helped the refugees adjust to their new countries.

The U.S., which had accepted the largest number of Indochinese, set up resettlement assistance programs which provided English language training, vocational training, health care and human services. Many took advantage of these opportunities and have begun building stable and prosperous lives.

Not only had these men, women and children been uprooted from their ways of life, they were totally unprepared for life in the United States. During evacuation or escape, they had experienced danger, deprivation and starvation. Upon arriving in the U.S., they faced the uncertainties of an unknown future in an unknown land.

The first, most important, barrier that faces all immigrants in the U.S. is their inability to communicate in English. As with all immigrant groups, food, clothing, housing, transportation, social customs and behaviors are equally strange.

Compounding this are many problems derived from the dissonance between Eastern and Western value systems.

Reverence for Age and Learning

In Asian cultures, the aged and learned are revered; honorific terms are used to address them. In Vietnamese there are more than 12 words for "I" and "you" (there are more than 100 words for "I" in Japanese). The rules for addressing people vary from language to language and social context to social context.

Family Life

Because of the cultures' stress on the central importance of the extended family, they all have elaborate kinship systems and a lexicon rich in kinship terms.

In Asian countries, three of four generations may share one household. Each person's role is clearly defined. The father is the economic head of the family while the mother cares for the children with the help of other family members. Life in the U.S. may force these roles to change if the father is unable to find employment and the wife works while children become their parents' translators.

Homesickness, depression, isolation and confusion may affect parents' ability to support their children as they move out of the home environment into that of the school. Here the children may be made to feel "out of place" because of their different appearance, dress and language.

Self and Society

Lau and Yu (1975) noted that the Western view of the self is individualized and independent as compared with the Oriental view of the individual as almost selfless or totally subsumed in the identity of the society. In the Chinese culture, for example, there is a "big self" which refers to the society and "small self" which refers to the individual sacrifice one makes for ones country; harmony of society is valued over health of the individual.

Language and Pragmatics

Language which on the surface appears to be solely a system of words (vocabulary) and grammatical rules (syntax), is fundamentally an expression of cultural beliefs and standards. For example, the word "yes" may mean "no" as individuals attempt to "save face." This makes the "yes" a cultural "yes", but a semantic "no." This Asian linguistic practice can confuse communication with native English speakers who value directness.

Pragmatic and paralinguistic rules differ from culture to culture. Accepted ways of sitting and standing as well as the distance that should be maintained between individuals can vary greatly. Identical gestures may communicate entirely different meanings. For example, the North American gesture used to beckon to someone is the same as the Filipino gesture of good-bye. A Chinese who nods is not saying "yes" but simply "I hear you." Asians rely heavily on non-verbal communication but because non-verbal clues (such as gestures) carry different meanings in different cultures, the possibility for misinterpretation and embarrassment is always present.

Conventions of politeness such as greetings vary also: a Vietnamese may say "How is your health?" , a Chinese would ask, "Have you eaten?" and a Filipino may say "How are you?" or "Have you eaten?" Burping which is considered ill-mannered in the U.S. is a Japanese sign of appreciation for food eaten.

In terms of interpersonal communication, most Asians prefer to use "minimum message communication" rather than the elaborations encouraged as good speech among English-speakers (Gardner, 1983). An Asian instructor views a student's silence as a sign of respect, whereas a North American instructor views a student's silence as a sign of passivity or lack of interest.

Religion

Religious belief is central to much of the Asian way of life. Vietnamese people who have historical connections to both France and China may be Buddhist, Catholic, Confucian or Taoist. Taoism emphasizes the importance of living in a state of harmony in which the "ying" and the "yang" (light and dark) are in balance. Confucianism teaches the importance of conducting oneself in accordance to high ethical and social principles.

Cambodians and Laotians who have been influenced by India are predominantly Buddhist. Buddhism stresses a pure and simple life uncomplicated by material possession: through reincarnation the souls of people return to life in other bodily forms.

In addition, people of various parts of Indochina, especially the highland Laotian people, practice Animism, the belief that everything, even a tree, has a spirit. Temples and shrines are built to worship these spirits as well as the wandering spirits who are paid respect through special ceremonies.

The tenets and practices of these religions dictate a lifestyle which is distinctly Eastern in character.

THE VIETNAMESE

The ethnic Vietnamese are believed to be decendents of Mongols who moved south and spread over the Red River delta. The Chinese ruled Vietnam for 1,000 years before the first Vietnamese dynasty was established in 938 A.D. Between 938 A.D. and 1776 A.D., Vietnam was a colony of China. In 1776, the country was divided in half, with the Nguyen dynasty ruling in the South and the Trinh dynasty ruling in the North. In 1867, the southern portion of Vietnam was colonized by the French who called it Cochinchina. In 1882, the French seized Hanoi and between 1887 and 1893 created a union of Tonkin, Annam, Cochinchina, Cambodia and Laos, calling it French

Indochina.

The French ruled French Indochina until 1945 when the Japanese overthrew the French authorities and granted independence to Vietnam. This was reversed with the Japanese surrender at the end of WW II. The Vietnamese then attempted to negotiate with the French for independence but failed; the French-Indochinese war ensued until the French were defeated at the battle of Dien Bien Phu. Under the 1954 Geneva Accord, Vietnam was divided along the 17th parallel into North and South Vietnam.

Seeking re-unification, Communist leaders recognized in the North began to penetrate the South in the early 1960's. After 1964 the war intensified and the U.S. became heavily involved. Finally, in 1973, a peace agreement was signed in Paris at which time U.S. troops withdrew and, on April 30, 1975, the Communists, under the leadership of the National Liberation Front, took control of the Vietnamese capital of Saigon (now Ho Chi Mihn City), ending the war. This resulted in the evacuation of more than 100,00 Vietnamese.

Vietnamese is a tonal language that is basically monosyllabic. In the early part of the 20th century, after the French occupation of the late 19th century, the Vietnamese adopted a modified Roman alphabetic system to replace the old writing system that had been derived from Chinese characters. Diacritical marks are used to signify the tone of each word.

The tones (the use of alternative pitches in pronouncing the same phoneme) produces different words with different lexical meanings:

level	ma	ghost
breath rising	má	cheek, mommy
breath falling	mà	but
falling rising	mả	tomb
creaky rising (low)	mã	horse
low falling(constricted)	ma	rice seedling

Words are also borrowed from other languages such as French, English, Malay and Chinese. For example, the word "mit-linh" has its origin in the English word meaning "meeting"; the word "xa-rong" is borrowed from the Malay word sarong,a wrap-around type of clothing; the word "xa-bong" is borrowed from the French word "savon," meaning soap; the word "basci" is taken from the Chinese word for doctor.

THE HMONG

Originally from China, the Hmong moved to the mountainous

areas of Indochina centuries ago and now live in China, Thailand, Laos, Burma and Vietnam. The term "Hmong," is derived from the word "hmoov" meaning "lucky, independent, free and mankind" as later changed to "Hmong" (the name of a great warrior leader, Hmong Zee Yeu).

The Hmong are a pre-literate and agrarian people with a rich oral tradition in which legends and folktales are transmitted from one generation to the next.

The Hmong worship many Gods such as, the God of the Whole Universe, God of the Sea. God of the Land, Mountains and Forests, God of the Home; ancestor spirits are also worshipped. The Hmong believe that everyone has a living spirit in his soul that keeps him alive; when the body rests and falls asleep, dreams of doing and seeing come because the spirit has left his soul in order to hunt and engage in hobbies. The Hmong believe in reincarnation and a life after death.

Derived from Chinese, the Hmong language is a Sino-Tibetan language. Hmong is a tonal language with eight separate tones of the same phoneme.

The Hmong organize their society into clans. In the U.S. there are about 18 such clans with names such as Chang, Chou, Chue, Fang, Hang, Her, Khang, Kong, Kue, Lee, Lo, Moua, Pha, Thao, Vang, Yang and Xiong.

In Hmong society one cannot get married to someone with the same last name; people with the same last names are considered to be brothers and sisters having originated from the same clan. In the Hmong marriage tradition the groom must pay a dowry to the bride's parents and then take his wife to live with his family. There is a strict division of responsibility within the household. The father makes family decisions and attends community meetings and events and the mother cares for the children and the house. Sons are taught to be brave, responsible and helpful to their fathers; daughters are taught to be modest, obedient and helpful to their mothers.

The Hmong identify themselves by the costumes as well as dialect. The White Hmong wear white skirts, whereas the Blue Hmong wear blue skirts. Additional groups of Red and Black Hmong distinguish themselves with red skirts or sheets wrapped around their heads and black sheets or large rounded hats for head wear, respectively.

THE LAO

The kingdom of Laos derived its name from a Tai ethnic group off-shoot called the Lao. In their early history the Tai occupied most of the present-day Szechuan and Yunnan provinces in Southwest

China. There they established the kingdom on Nan Chao in the 8th Century A.D.; its capital was in Yunnan. Nan Chao, a relatively well organized and militarized state, existed until 1253 when it was destroyed by the Mongols under Kublai Khan.

Chinese expansion, even before the destruction of Nan Chao, had brought pressure on these Tai peoples who gradually migrated farther south. Some Tai, including the present-day Lao, followed the Mekong River into the rugged, sparsely populated northern hinterland of the Khmer empire which was centered in the modern Khmer Republic (Cambodia). Inhabiting this area were two distinct groups of people. One group was dark skinned and believed by some to have been in the area since the time that land bridges linked the continent with the major archipelagoes near Southeast Asia. The second group was the Malaya/Polynesian, who had migrated there sometime between 500 B.C. and A.D. 500. There were also some Cham, Mon and Khmer peoples who may have been of Malaya/Polynesian origin.

In the 14th Century the Lao, Fa Ngoun, married a Khmer princess. Fa Ngoun converted to Theravada Buddhism and received from his father-in-law a Buddhist mission whose monks brought scriptures and a gold statue of Buddha which may have originated in Ceylon. Fa Ngoun established Buddhism as the state religion in spite of the fact that most people continued to worship Phi.

Educational Implications

The most common of the Asian subgroups to be found in basic literacy classrooms are, at this point in U.S. society, the Hmong and the Lao. It is important not to generalize, as was done with other Asians, about the ways of learning of these groups. If previous Asian subgroups were perceived as more academically capable and economically stable, the Hmong and the Lao are different in that they are, by today's standards, more economically marginalized and have had less exposure to schooling. Below we offer some observations on incongruencies between American teacher's expectations and the school behaviors of Asian groups such as the Hmong and the Lao. The purpose of this table is not to generalize about the groups, but merely to remind teachers of possible expressions of culture that can affect the learning of students from these groups.

Incongruencies in American/Hmong/Lao Expectations

American Teachers' Expectations	Asian Students' Expectations
Students need to participate in classroom activities and discussion	Students are to be quiet and obedient
Students need to be creative	Students should be told what to do
Students learn through inquiry and debate	Students learn through memorization and observation
Asian students generally do well on their own	Teachers need to teach; students need to study
Critical thinking is important. Analytical thinking is also important.	It is important to deal with the real world.
Creativity and fantasy are to be encouraged.	Factual information is important; fantasy is not.
Problem solving is important.	Students should be taught the steps to solve problems.

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ADULT LEARNERS OF LATIN AMERICAN DESCENT

The last two decades of this last part of the twentieth century have witnessed an emerging collective identity among people of Latin American descent living in the United States. It has been argued that this new "collectivity" has been made necessary as a defense against chronic social and political disenfranchisement. The term "Hispanic" has emerged, especially within official government circles, as an identifier for all people's of Spanish-speaking origings living in the U.S. Others prefer to use the term

"Latinos." However, this exogenous identity[31] does not seem capable of supplanting the power of national-origin (endogenous) membership and symbolism. Clearly, the various cultural groups that make up the Hispanic population of the U.S. today think of themselves, first, as Mexican, Puerto Rican, Cuban, Salvadoreans, etc. In the following pages we will survey both of these identity making forces.

The 20 million Hispanics now living in the United States are distinct from the majority population in terms of their Spanish heritage and language; a cohesive family structure and religious devotion are other characteristics which have been ascribed to Hispanics as a whole. Most U.S. Hispanics are decended from a mixture of European, Indian and African blood and culture, brought together over time on one continent by historical events.[32] Jose Vasconcelos writing about this racial blend at the turn of the century used the expression "la raza cosmica," the cosmic race.

Before Spanish colonialists "found" the New World, the islands of the Caribbean, as well as the mainland of Central and South America, were inhabited by a myriad of indigenous people. Some of them had highly developed cultures. It has been said that some of these cultures were

> characterized by cities of enduring construction and by small, corporately organized communities where the individual was subordinated to society and land was owned communally... [where] religion defined man's origin and destiny, his place in the universe and in human society.[33]

Among these cultures, the Incas of Peru, the Mayans of Guatemala and the Aztecs of Mexico are the best known. It was however the less known Caribs and Arauacos of the Antilles (of which Puerto Rico and Cuba are the largest) who first encountered the conquistadors, Columbus among them. Puerto Rico in fact became "an experimental center of colonization ... a base from which other expeditions were launched" into the as yet untouched South American

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[31]see Joan Moore, "Hispanic/Latino: Imposed label or real identity" in Latino Studies Journal, May 1980. In this article Moore discusses exogenous identity as an identity based on the external similarities of a "group" as perceived by the larger society e.g. language, race, cultural tradition.

[32]see Moore,1990.

[33]see, Liss, Sheldon B. & Liss, Peggy, K. (1972). Man, State and Society in Latin American History, NY: Praeger.

continent.[34] At the hands of the Europeans "these two groups suffered jointly one of the greatest ethnocides recorded in history."[35]

From the islands, the Spaniards moved on to the mainland, fulfilling their mission to acquire land and resources for the Spanish crown and Catholic church. While the indigenous populations outnumbered the newcomers, historians attribute their speedy submission to the Spaniards to religious beliefs that were relatively fatalistic as compared to Christianity's belief in eternal salvation. Many Aztecs actually welcomed Cortez as the foretold reincarnation of the ancient god, Quetzalcoatl.

The Spaniards, who considered themselves holy warriors, regarded the Indian people of the Americas as irreligious barbarians in need of Christianity and Euro-Spanish culture. "Except in the dim past of Oriental history," writes Venezuelan Mariano Picon-Salas," mankind has perhaps never known a conflict between peoples of such opposite ways of life as the Spanish conquest of America. It was a clash of races, economic attitudes, and contrasting modes of existence that still complicates the problems of social relationships in every country of Latin America."[36]

The integration of European Spanish culture into indigenous culture was rapid, accomplishing a wide spread Christianization of the Indians as well as their subjugation as an agricultural labor force. Likewise, the indigenous culture permanently affected that of the colonizers creating a synthesis of the two which influenced their countries' literature, language, religion, character and world view for all time. Alzaga writes that honor, passion, a simple piety, stoicism and the unity of realism and idealism[37] was

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[34]see Paquita Vivo, "The Puerto Ricans - Two Communities, One Culture" in Agenda, 9-10.

[35]see Roberto Fernandez Retamar, Caliban and Other Essays. Minneapolis: University of Minnesota Press.

[36] see Mariano Picon-Salas, "The Initial Encounter" in Liss & Liss (1972), Man, State and Society in Latin America, NY: Praeger.

[37]This paradox is described by Florinda Alzaga in her article "The Three Roots of Cuban Heritage" (Agenda) as symbolized in the personas of Cervantes' Don Quixote and Sancho Panza:

> "Through the Castilian Mancha, two men ride their horses. One is an emaciated nobleman on a bony hack horse. Despite the shield and spear and the strange washpot on his head he calls a helmet, he commands respect. His speech is soft and low, haughty at times, like that of a man sure of himself. His eyes shine with the glint of big dreams. He is a knight errant. His

the European contribution to this hybrid heritage.

Africans who were wrested away from West Africa to supplant Indians in the slave labor force added to this mixture of peoples in island as well as mainland countries such as Brazil, Venezuela, Peru, Uruguay, as well as the southeast coast of Mexico and eastern coast of Central America.[38] Having been taken from their homeland by the Spaniards per force, Blacks clung to their ancestry in exile. Music, dance and a primitive religion --santeria-- as well as the belief in magic that is found in Caribbean culture is evidence of this heritage.[39]

As a result of this historical confluence of peoples, the majority of Central and Latin Americans are mestizo, claiming some Indian heritage. There are, however, social divisions within countries. These center around issues of race, language and class: the Euro-Latin Americans (more "white" looking) predominant in the upper classes and the Afro-Latin Americans and Indians occupy the impoverished lower class. Considering this stratification, Joan Moore speaks of Latin America as having a "caste-like hierarchical structure with racial distinctions."[40]

In the 1800's, revolutionary movements brought together the criollos (the upper class American born landowners and government functionaries of Spanish decent) and the mestizos in a successfull

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job? To roam the world, righting wrongs: protecting maidens, helping widows, aiding all who are in need of succor. Don Quixote has forsaken all to follow his ideal. Next to him, on a donkey, rides Sancho Panza, short, pragmatic realist. Through the Castillian steppe they ride, idealism and realism, in full harmony. Day after day they share food, lodging, blows and heroism. They talk, argue, defend themselves and gradually and imperceptibly, they begin to influence each other. Towards the end of the book, Don Quixote, a moral wreck after the demeaning defeat of the Knight of the White Moon, "Sanchifies" himself. The inn is now as ann and no longfer a castle; he acknowledges the mistakes of his folly and dies a melancholy death... the "Sanchification of Don Quizote, the "Quixotization" of Sancho Panza - realism and idealism entwined in the soul of Spain - this is the paradox..."

[38]see Magnus Morner (1978), "The Impact of Regional Variety on the HIstory of the Afro-Lain Americans," Secolas, IX,Carollton, GA: Kennsaw College.

[39]see Florinda Alzaga, "The Three Roots of Cuban Heritage" in Agenda, 9-10; Paquita Vivo, "The Puerto Ricans -Two Communities, One Culture" in Agenda, 9-10.

[40]see Joan Moore, "Hispanic/Latino: Imposed label or real identity" in Latino Studies Journal, May 1980.

fight for their independence from Spain. These revolutions, lead by men like Miguel Hidalgo, Simon Bolivar, Jose de San Martin, Jose Marti, and Ramon Emeterio Betances, just to name a few, were inspired by the ideals of the French revolution.

Within ten years of gaining their independence from Spain, Mexico once again had to fight for its sovereignty as the U.S. Cavalry invaded Mexican lands and white Texans fought for their independence from Mexico. The official U.S. policy of Manifest Destiny provided a religious rationale for the expansion of U.S. territory into the lands of northern Mexico: lands which were lost with the 1848 signing of the Treaty of Guadalupe Hidalgo that ended the Mexican-American war. The U.S. occupation of this territory (which included most of what is known today as the states of Texas, New Mexico, Arizona, Colorado, Nevada, and California) created the conditions for both the impoverishment of former landholding Mexicans as well as the present-day divisiveness which separates Mexicans from U.S. Chicanos and Mexican nationals from their own countrymen. These divisions show up officially in the U.S. Census which had to include three self-identifiers for persons on Mexican Origin: Mexican-American, Mexican and Chicano.

Without land, the conquered Mexicans of the north who had been transformed into U.S. citizens by decree, formed a labor pool for U.S. agriculture and industry. In fact, writes Rodolfo Alvarez:

> It would be impossible to explain the existence of mining, railroad, sheep and agricultural empires of the Southwest apart from the massive use of Mexican-American labor, often in conditions of virtual peonage.[41]

As can be expected, all of this shifting of land and position, affected the psycho-social framework of the Mexican-American. Where they had constituted the majority in their native land, the rapid migration of Anglo-Americans to the Southwest quickly transformed them into a numerical minority in their own ancestral homeland. Alvarez discusses the Mexican American as distinct from other immigrant groups because, in fact, they are an **indigenous** group whose "identity as a people would be to the [Southwest] as a land of origin, not land of destination."

Resistance to assimilation has characterized the relationship between people of Mexican decent and the U.S. mainstream. This resistance has been both actively and passively expressed by Chicano activists (e.g. Corky Gonzalez, Cesar Chavez, and Reies Lopez-Tijerina) and by traditionalist Mexican-Americans of Texas as examples of both ends of the spectrum.

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[41]see Rodolfo Alvarez, ""The Unique Psycho-Historical Experience of the Mexican American People" in Chicano: the evolution of a people, R. Rosaldo, R. Calvert and G. Seligmann, Eds.Minneapolis: Winston Press, 1973.

In her book, La Frontera, Gloria Anzaldua poignantly describes the affect of historically evolved language differences among people of Mexican origins:

> "Pocho, cultural traitor, you're speaking the oppressor's language by speaking English, you're ruining the Spanish language." I have been accused by various Latinos and Latinas. Chicano Spanish is considered by the purist and by the most Latinos deficient, a mutilation of Spanish.
>
> But Chicano Spanish is a border tongue which developed naturally...Chicano Spanish is not incorrect, it is a living language.
>
> For a people who are neither Spanish nor live in a country in which Spanish is the First language; for a people who live in a country in which English in the reigning tongue but who are not Anglo; for a people who cannot entirely identify with either standard (formal, Castillian) Spanish nor standard English, what recourse is left to them but to create their own language? A Language which they can connect their identity to, one capable of communicating the realities and values true to themselves - a language with terms that are neither español ni ingles, but both. We speak a patois, a forked tongue, a variation of two languages.
>
> Chicano Spanish sprang out of the Chicanos' need to identify ourselves as a distinct people. We needed a language with which we could communicate with ourselves, a secret language. For some of us, language is a homeland closer that the Southwest - for many Chicanos today live in the Midwest and the East. And because we are a complex, heterogeneous people, we speak many languages."[42]

The point made by Anzaldua is that, as everywhere, the Chicano does not create language: they participate in it as it evolves to suit its users needs.

A similar kind of identity conflict is felt by Puerto Ricans who for economic reasons are living in the cities of the U.S. mainland, but have cultural and familial ties to their island. As urban workers, Puerto Ricans generally occupy the lowest strata of the service work force. They are, in this way, marginalized on the job and ghettoized in their neighborhoods, but affected, nonethless, by the influences of these North American cities. Language and values change in these settings making them strangers on their island and visiting workers on the mainland.

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[42]see Gloria Anzaldua, Borderlands, La Frontera, San Francisco: Spinster Press, 1987.

Educational Issues

It is an irony that in the United States progress towards democracy has been led by those furthest from it. Likewise we find that a discussion of the education of Hispanics raises issues which are potentially relevant to a much broader group of learners. These issues may be divided into **Educational Policy, Educational Content** and **Educational Style.**

Educational Policy

The push for bilingual education is probably the best known Hispanic educational initiative of recent years. While studies of turn of the century urban areas show bilingual education (German-English / Polish-English) as accepted practice, Spanish language instruction for Hispanics has had a hard time of it. We must understand that the (usually) unarticulated reason for this is the low regard, by school systems and policy makers, for the Hispanic children attending their schools as well as the lower status ascribed to their home language, this in spite of the fact that, with the exception of indigenous languages, Spanish has been spoken on this continent longer than any other language and it is predicted that it will dominate English in the Hemisphere by the year 2,000.[43]

The fight for bilingual education has been waged on the basis of democratic, linguistic and pedagogical principles. As argued in a UNESCO document,

> It is axiomatic that the best medium of teaching a child is in his mother tongue. Psychologically it is the system of meaningful signs that in his mind work automatically for expression and understanding. Sociologically, it is a means of identification among the members of the community to which it belongs. Educationally, he learns more quickly through it than through an unfamiliar linguistic medium.

In spite of this logic, however, bilingual education has been on the defensive. Bilingual programs where some Spanish is used to facilitate students' transition to English dominance have a greater acceptance in U.S. schools than programs which promote the teaching of English and the maintenance of Spanish.

The bilingual education movement has led adult literacy educators to experiment with first language instruction with good

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[43]Jorge Lara-Braud writes that "native speakers of Spanish and Portuguese together will number roughly twice as many as those who will be native speakers of English. Spanish surnamed U.S. citizens will then number approximately twenty million, of whom about four million will be Texans."

results. "When we deal with language," says Jorge Lara-Braud

> "we deal with life at its core. It is the means by which an individual decodes his experiences for creative dialogue with others. Memory, affection, aspiration, reflection, anxiety, discovery, religion and a myriad of other personal experiences are mediated through language."[44]

In terms of educational policy directed at improving students' retention in school/college settings, educators working with Hispanic students must actively challenge both the perception and the reality of what Ogbu calls the "job-ceiling," i.e. the highest level of occupation available to people of minority backgrounds. This is important because, as Blair suggests, "Mexican-American and other castelike minority people probably realize, albeit unconsciously, that additional schooling or graduation from high school or college brings less returns, when compared with the resources and effort they have to invest in schooling."[45]

Educational Content

Language surfaces again as an issue in curricular content. So does the inclusion of Latin American literature and history. It is not enough that a student should learn their mother tongue if they are not also provided with opportunities to explore the aesthetic, cultural and political heritage which it has encoded.

By "inclusion" we mean that literature by Latin American authors must be <u>included</u> in literature survey courses; that the History of the Americas be taught in a way that accurately reflects pre-Colombian life, the subjugation of the indigenous people during Spanish colonial and U.S. expansionist movements, and the subsequent developments surrounding the formation of Hispanic culture as we know it today; and that teachers incorporate into the curriculum the contributions of Hispanics to American life, as well as those of other ethnic/racial groups.

Educational Style

Speaking of policy directions, Jose Hernandez writes that

> New policy directions must include the strength of Latino culture: the familism and humanism of the Indian and African traditions, the importance of team work and cooperation for group success, and the virtues of patience, courage and vitality. From the Spanish tradition, we must stress self-reliance, dedication, politeness, and respect for our own and

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[44]see Lara-Braud, p. 343.

[45]see Ogbu, p.234.

other authority.

The admonition to attend to these characteristics which are positively correlated with relational learning style, is no less important in a classroom environment. Students of Hispanic descent, as well as others, should be enabled "to discover these positive values in their lives through knowledge and appreciation of their history, culture, literature and expressive arts."[46]

* * * * *

AMERICAN INDIAN LEARNERS

The indigenous people of North America are not a culturally or even linguistically homogenous group. Although they are commonly referred to as American Indians, a term which implies sameness, in fact, North American Indians are a sub-group of all indigenous people of the Americas (i.e. of the North, Central and South parts of the hemisphere), and consist of over 300 distinct tribal groups. Having arisen in different circumstances, each has its own unique relationship to the envirnment, expressed as cultural values.

Even with this diversity, some generalizations can be made about traditional cultural values. Caution must be used, however, in applying these holistically to present-day individual members of American Indian groups given the many influences to which they have been subjected as a people.

In terms of external influences, it should be noted that during the years of **Allotment** (1889-1924) and again during the years of **Termination** (1944-1960), American Indian children, whose forebears had been forcibly placed in reservations, were again forcibly removed from these same government allocated homelands. They were placed in government boarding schools far away from their tribal units.

The goals of the earlier period (Allotment), while cloaked in benevolent sounding language about enabling individual Indian children to integrate into the wider society, had several other aims. These included breaking up the tribes' communal lands and to educate the children into middle class values and English speech. This accomplished, both, a psychological and physical distancing of Indian children from their tribal people.

The later period (Termination) is discussed by Ogbu as an attempt at "making Indians better Americans rather than training

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[46]see Jose Hernandez, "Latino Alternatives to the Underclass Concept." Latino Studies Journal, 1/90.

them to be better Indians."[47] The grandchild of this federally sponsored Indian education are the reservation schools of the BIA (Bureau of Indian Affairs). The other significant influence on the integrity of Indian culture and language promoted by Termination policies were the ending of reservation status and the (albeit highly questionable) benefits of "government protection." With Termination, Indians who, as a group, are statistically "the poorest of the poor," began migrating to urban centers for economic survival. This migratory lifestyle, whereby tribal members find seasonal employment in the cities and return off season to their homelands, is still the norm today.

In recent years, American Indian leaders have attempted to address the educational needs of urban-living Indian children by establishing schools which nurture the traditional culture while teaching academic skills necessary for their success. Milwaukee's Indian Community School is an example of this.

Traditional Education

The following are generalized characteristics of traditional Indian education:

1. Legends and stories were the primary method of teaching values and attitudes. The legends and stories often had highly symbolic meanings and involved intricate relationships. The use of symbolism, anthropomorphism (given human characteristics to animals and objects), animism and metaphors was an extremely affective method of teaching very complex concepts. These methods allowed the learner to understand at his or her level of cognitive and emotional development. When the learner recalled the story or legend a few years later, it acquired an even deeper meaning. Oral tradition was the mode for passing on culture and history.

2. "Watch-then-do" was a primary method of teaching children acquired skills in the family and tribal environment with elders "showing" the way. Explanations and questions in verbal form were minimized. Supervised participation was a major mode of skill learning. Talking about oneself, even in a learning situation, was often considered boastful and inconsiderate.

3. The spirit of cooperation was essential in maintaining the tribal group and family. Competition was usually dealt with in the sports and games developed by American Indians.

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[47]Ogbu, p. 229.

4. A traditional American Indian view of the future and time are quite different from that of contemporary Western culture. These differences are difficult for non-Indians to comprehend as they are complex and varied. Contrary to popular stereotypes of American Indians, the future was highly valued, but conceptualized differently. For instance, tribal teachings stressed that all decisions made affect the seven generations to come.

5. A major characteristic of traditional American Indian life was that children were allowed to explore and be independent as soon as they were able. They were allowed to learn from their mistakes. A policy of non-interference existed unless there was a real danger which would mitigate against this. Often misbehavior was ignored so that the child would learn the natural consequences of misbehavior and learn to be in charge of him/herself. Another major factor was that grandparents and other elders in the extended family were responsible for much of the child's education

6. Teaching was conceptualized in a completely different manner in traditional American Indian cultures. Children were expected to constantly observe the world around them and learn from it. From this it can be seen that one does not "teach" a child to learn. This amount of intervention in the child's autonomy would risk forever destroying the child's ability to observe and learn from his own motives.

7. Communication style is another important aspect of life. Communication was regarded as both verbal and non-verbal with much significance attached to the later. Silence was also used as means of communication. Eye contact and quiet calmness were important methods of discipline and communication. Children were not tested or questioned after a learning situation since they were expected to self-test.

8. Elders are accorded the respect befitting people of their age and experience. They are the "teachers."

Indian Education Today

As previously discussed, traditional cultural practices and values were significantly impacted by European culture and governance. The post european contact experience of the indigenous people of North America (the United States and Canada included) has been one of forced migration, termination, forced assimilation and isolation compounded by economic and social imperatives.

Recent research and teacher data indicate that, despite these experiences, important differences in learning styles can be observed between Indian and non-Indian students. The differences, while not consistent enough to suggest a unique American Indian Learning Style, are evident enough to warrant careful attention.

This research[48] suggests that among American Indian learners today there is:

1. A high frequency and relative strength in global processing of both verbal and numerical tasks. A strength in processing spatial information visually has also been observed.

2. An approach to the world with a quiet and persistent mode of exploration/observation which precedes performance. This can be characterized as a "watch-then-do" approach to learning, as opposed to trial-and-error.

3. Rather than word association, the construction of mental images are associated with memorization and comprehension tasks.

4. A preference for collaborative learning activities where learners participate actively and verbally in group projects and where situations allow students to voluntarily participate. This has been found to be more successful than situations in which individual learners are asked to perform on demand in a large group setting.

5. A positive predisposition to small group and team learning which emphasizes cooperation over competition.

As with other ethnic groups, we stress the importance of culturally inclusive curricular content and materials.

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[48]one source of information on Indian learning is "Cooperative Learning and the Native American Student" by Lee Little Soldier, Phi Delta Kappan, October 1989.

CHAPTER 3

THEORETICAL FRAMEWORK FOR CULTURAL INCLUSIVENESS AND RELEVANCE

Acculturationist Models

Before we continue with our proposed pluralistic and effective multicultural model of education, let us first examine the operational assumptions of education for acculturation and assimilation, which we maintain, has worked more against than in support of the literacy development of minority and immigrant adult learners.

Philosophically, acculturation is based on the presumption that individuals can and should outgrow their circumstances. Individuals are thereby defined as separate from a larger reality. Success rests on the strength of each individual's efforts. Implicit in this view is the notion that the goal of education is to enable the individual to master the skills and attitudes prescribed as necessary by the "powers that be."

Acculturationist will argue that the attainment of social and economic equality necessitates the de-emphasizing of differences, including those derived from cultural and linguistic origins. These differences tend to be viewed as dysfunctional because they serve to separate individuals from, as opposed to integrate them within, the dominant culture where it is presumed we must all want to be. In place of "dysfunctional" values, attitudes and behaviors, individuals who prize success are required to assume dominant values, including, in our society, individualism.

This is the educational model in current practice in most schools and, sadly, supported by most teacher's unions. Says, AFT president, Albert Shanker

> Our public schools have, by any reasonable standard, enjoyed great success ... Masses of immigrants, the poor, the illiterate have been educated and, through education, have achieved unprecedented upward social mobility.[49]

However, the promise of upward mobility, promoted by Mr. Shanker and others, has not materialized for minorities of "color."

School systems practicing the acculturationist model also

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[49]In Greer, The Great School Legend, pp. 13-22.

require the use of standardized texts and tests with outcomes measured according to one yardstick.[50]

Multicultural/Pluralistic Model

Opposed to the acculturationist model is a multicultural or pluralist model. Its philosophical premise is that individuals function within groups (culturally, linguistically and class-based) and that a person's ability to become self-actualized is tied into the ability of the group to flourish, i.e., there is no "freedom" until we all are free.[51] As a result, the importance of literacy, and education as a whole, is to enable the individuals within the group to access and produce texts which affirm and validate their cultural identity, e.g. socio-religious texts, folklore, and/or historical in content. Advocates for multicultural education assert that through this process of affirmation and discovery group members become full participants, not just in the group's life, but in their own way, they also achieve wholeness.

Educational programs which follow this outlook are based on the view that each culture must define its educational agenda with the preservation of cultural identity and group membership as a pre-eminent concern. It rejects as both racist and classist the notion that non-mainstream groups are inherently deficient, and does not accept the view that to attain equality of social and economic access one must reject one's culture and language or cease to culturally exist. Multicultural models of education emphasize that effective participation in a culturally diverse society such as the U.S. is enhanced by one's sustainment of ethnic/racial cultural values and practices and one's native language. Following this, the multicultural approach is non-remedial in content and seeks to teach from the social/cultural/ linguistic experiences of students. Outcomes are measured according to the social uses and usefulness of skills taught and learned. (See figure 2.)

The **Multicultural Education Model** draws on the rationales developed by two separate disciplines:

* Pedagogical theory argues that learning (the development of skills and knowledge) happens as we proceed from the familiar towards the unknown; that what we have experienced directly or indirectly, constitutes our schema through which we gain an understanding of what we do not yet know.

* Socio-Linguistic and Anthropological studies inform us

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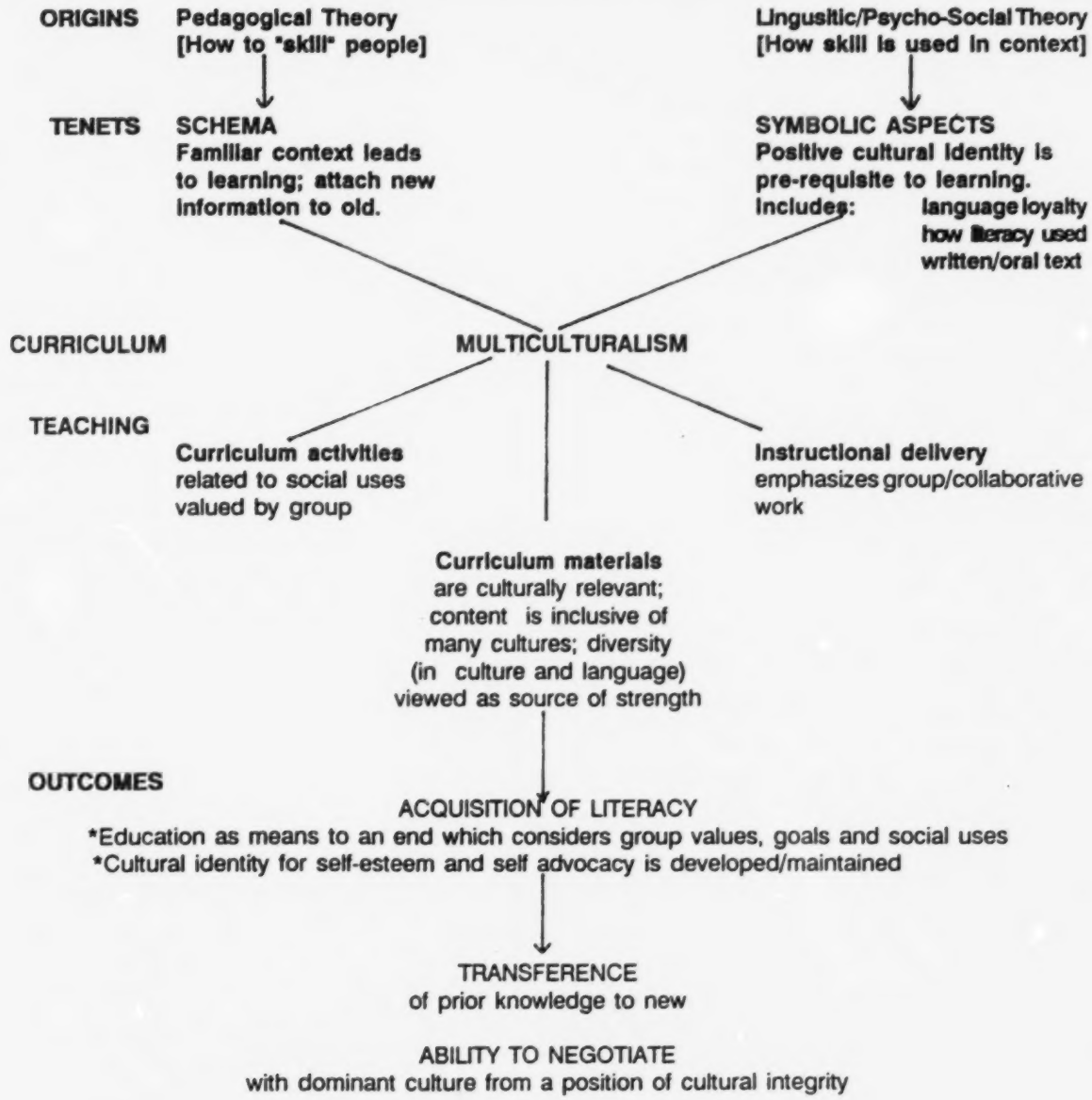
[50]Bernardo M. Ferdman in "Literacy and Cultural Identity," Harvard Educational Review, Vol. 60, No. 2, May 1990.

[51]Ibid.

regarding the social uses of skills and/or knowledge, i.e., that they are important and culturally relevant. We learn according to our need to know, given the context in which we interact with the world, thus pointing to the need for a synchrony between school and culture.

figure 2

A PLURALIST EDUCATION MODEL



These theoretical underpinnings are accented by what we know about adult learning: namely, that we must teach the learner, not the subject.

Multiculturalism is therefore not practiced simply because it shows our sensitivity to adult learners from diverse cultural/linguistic backgrounds, but because learning does not happen unless we affirm the learner and his/her cultural identity, we built on his/her prior knowledge, and we recognize the social uses of education/skill acquisition.

It must also be said that far from segregating this student population within the limitations of its own immediate experience, by first developing strong cultural identity and skills based on their need to know, we also create the conditions for transference. That is, once one acquires a working knowledge of what is familiar, he/she can apply learning strategies acquired in the course of that study to unfamiliar subjects. Multiculturalism is therefore the foundation for success not just within the immediate, but also, as elucidated by Donaldo Macedo, in the larger (oftentimes hostile) community:

> The notion of emancipatory literacy suggests two dimensions of literacy. On the one hand, students have to become literate about their histories, experiences and the culture of their immediate experience. On the other hand they must also appropriate those codes and cultures of the dominant spheres so they can transcend their own environments.[52]

It is towards these dual roles that our pedagogical method and curricular goals have been constructed. (See figure 3.)

It is essential that adult educators assist learners explore, question, and build upon knowledge gleaned from an inquiry of themselves, their roots, their family and their community. The instructor does not transfer knowledge as from a subject to an object --from an all-knowing to a non-knowing-- but involves learners in dialogue using first an oral/discussion approach. I.e., learners are engaged in describing themselves and should thereby come to understand the concept of culture and history in personal terms, therefore affirming themselves within the world. Social awareness and cultural identity and pride evoked in this manner become the intrinsic motivation for a continued pursuit of knowledge.

Following this, it makes sense that the educative arena must be the community in which learners live; therefore, the community

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[52]Paulo Freire and Donaldo Macedo in Literacy, Reading the Word and the World. South Hadley, MA, Bergin and Garvey Publishers: 1987.

becomes their "school," from which they begin to gain intentional educational experiences. In this way both the community and individual learner gain worth.

As learners begin to develop a positive sense of self and community, they will also feel free to develop a critical attitude essential to moving beyond. In this way we seek to **EMPOWER** individuals as members of cultural/linguistic groups and as learners capable of changing their world.

figure 3

EDUCATION MODELS

	ACCULTURATION	V. PLURALISM
PHILOSOPHICAL AND CULTURAL-BELIEFS: -what is reality? -who am I? -what is freedom? (social v. personal)	The individual can grow out of his/her circumstances. Individual growth is freedom.	The individual is part of a group. Individual freedom is tied to the group flourishing.
EDUCATIONAL PHILOSOPHY: -education for what? -what is literacy? (school v. cultural definitions)	Literacy is a standard set of skills and attitudes determined by the mainstream culture & economy. Education is the "Great Equalizer." Equal access is gained on the basis of achieving this set of skills.	Literacy is the ability to access (or produce) texts that are significant w/in culture. There is strength in diversity positively asserted by group members.
CUCCIRULAR ASSUMPTIONS: -"Schools should....."	De-emphasizes cultural differebces. Non-Mainstream cultures are dysfunctional. Dominant values are "correct."	Uses content relevant to group members. Main values are cultural identity and group membership. Non-remedial
EDUCATIONAL PROGRAMMING: -content/material -methods	Standardized texts and methods leading to individual achievement; compensatory education where needed (tutoring)	Group instruction using culturally sensitive/ language sensitive material and methods.
OUTCOMES: -"success/literacy is "	Economic & social assimilation; proficiency with standard literacy tasks. One yard stick for measuring success	Cultural identiy, self-esteem, group-specific measures of success defined by social uses of skills. Many yardsticks

CHAPTER 4

PEDAGOGICAL PRACTICE

Activities in support of teaching academic areas and units towards the previously described curricular goals can be characterized as creative/expressive (as opposed to passive/ receptive) emphasizing speech, writing, reading and math/science for problem solving, and based on whole language learning and content enrichment, as opposed to skills based teaching.

CRITICAL THINKING

In order for students to identify and study themes of their choosing, the educational experience must not be structured too rigidly, setting times for completion or specific objectives, the teacher must always be ready for "teachable moments." Since the community becomes the classroom, the learning area is widespread and filled with numerous possibilities for obtaining knowledge and skills. It is the teacher's job to glean these moments and possibilities from out of the ordinary. That is what Ira Shor advocates in Critical Teaching and Everyday Life:[53]

> ... the adaptation of study to the situations of mass life will make intellectual work of tangible relevance to students. This will be a novelty to them. Prior years of mass schooling have been ridiculously remote from their needs, so school itself has helped invalidate mental work. As it now stands, the power of the mainstream runs separately from the power of structural thought. Bringing the two together is a simple idea. It will also be catalytic.

As students become involved in their roles as community observer/researchers, they will become collaborators in the curriculum development process. They will as, Freire wrote, "have moved from the level of instinctual, stimulus-response behavior, to meaning making, to mediated activity, to making culture."[54]

Students must see, feel, hear, smell and taste the world, slowly and reflectively, beginning with their own personal/ immediate world. They must be taught to perceive in ways that formulate concepts, generate critical thinking and perceive the new importance of "old" things. Again Freire is instructive:

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[53]Ira Shor in Critical Teaching and Everyday Life. Chicago, University of Chicago Press: 1980.

[54]Paulo Freire in "Learning to Read and Write in Sao Tome and Principe," in Harvard Educational Review, Vol. 15, No. 1, 1981.

> Through this kind of interaction with their world, they will begin to exercise control over their world; they will begin to know it for the first time, knowing that they know and respecting that knowledge ... they read the world and then learn to read about it.[55]

Analytical abilities are developed in all areas and in all activities by following this sequence of enabling skills for critical thinking:

OBSERVING -observation refers to the systematic gathering of facts or information. Examples of this include:

1) Reading and listening carefully
2) Tactile and visual examination
3) Recalling previously gathered information

CLARIFYING -Clarification is perceiving the meaning of the material (ideas, facts, concepts) being observed/gathered, so that one may explain it. Examples of this include:

1) Stating the central idea of an essay, article, etc. in one's own words
2) The elimination of obviously irrelevant material
3) Moving from the denotative value of words to the connotative
4) Translation of material from verbal to symbolic and symbolic to verbal (illustrations, maps, tables, etc.)

ORGANIZING -Organization involves the creation of a systematic and functional classification scheme well-suited to the situation at hand. Organization must begin as soon as a person observes new information to add to his knowledge base, but the person must also be open to appropriate reorganization at any point in the thinking process. Examples of classification schemes include:

1) Chronological
2) Hierarchical
3) Pattern Formation
4) Spatial
5) Systematical
6) Thematic

[NOTE: The type of organization referred to here is not necessarily synonymous with organizing material for the purposes of communication.]

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[55] Ibid.

ANALYZING -Analysis is the separation of a whole into its constituent parts for individual study. Examples of this separation and subsequent study include:

1) Identifying the elements of the subject e.g. stated or unstated assumptions, hypotheses, conclusions, statements of value, statements of intent, rules, arguments.
2) Identifying relationships between/among elements, e.g. compare and contrast, cause and effect, hierarchical, chronological, symbiotic.

SYNTHESIZING -Synthesis is arranging two or more parts or elements to form a new structure. Examples of this include:

1) Formulating hypotheses or plans for solving problems
2) Writing creatively
3) Deriving a mathematical or chemical process
4) Producing an alternative scheme for interpreting events, objects or ideas
5) Estimating future trends

EVALUATING -Evaluation is informed judgement about the accuracy and worth, strengths and weaknesses of thoughts, actions, propositions according to identifiable principles. It is done continuously throughout the critical thinking process. Evaluation includes judgments about both specific and limited points and the overall accuracy and worth of a whole, for example:

1) Assessing the reliability of the source of data, claim, etc.
2) Distinguishing between relevant and irrelevant information
3) Recognizing propaganda techniques
4) Identifying potential biases
5) Identifying assumptions
6) Recognizing logical fallacies (begging the question, circular reasoning, etc.)
7) Recognizing the values and premises implicit or explicit in the issue

The goal, again, of this thinking process is to enable students to critically examine their daily interactions with their "world" including the print within it. As Freire discusses, this is necessary because,

....In many cases individuals have not yet perceived themselves as conditioned; on the contrary, they passionately speak of their freedom. When challenged by a critical

educator, students begin to understand that the more profound dimension of their freedom lies exactly in the recognition of constraints that can be overcome.[56]

INTERACTION

It should be noted that while individuals examine their own "realities," there is also a great deal of sharing of separate and/or different realities. In this way, all cultures are valued and taken together as the basis for the creation of new and better solutions to the problem of living. This recognizes that the universal aspects of human experience are central to the development of our humanity. If, by contrast, students have few opportunities in the classroom to get to know each other by directly talking with each other, they remain distant assuming that their concerns and problems are within them as opposed to shared with others, and originating in some interplay between themselves and external sources. Dialoging also serves to break down barriers by allowing students to examine and expose the traditions and/or prejudices which have handed them down.

Students need more opportunities to talk about what they are learning, to test their ideas, reveal their assumptions, talk through areas where new knowledge clashed with ingrained beliefs. Interaction allows for the possibility of individual growth as students learn about the value systems of other cultures and people, and of using the opportunity to alter and/or reaffirm their own.

ON BEING EXPLICIT

As lesson activities unfold, providing opportunities for affective and cognitive growth, the importance of explicitness must be underscored. Explicitness recognizes that each "mistake" is an opportunity for teaching the skills of analysis and self-correction through teacher intervention. Providing strategies for knowing and modeling the use of these strategies reveals to the learner the "in between" steps that must be taken, but which may not have been made clear so far. This is an opportunity for the teacher to "think out loud."

Because our language is highly context dependent (i.e., word meaning and connotation can change depending on use and inflection/intonation), it functions, in effect, as a code, which obscures for the uninitiated (non-English speaking, non-academic speaking) the meaning of what is being said. It is therefore

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[56]Paulo Freire and Donaldo Macedo in Literacy, Reading the Word and the World. South Hadley, MA; Bergin and Garvey Publishers: 1987

important that teachers choose words carefully, but also explain new words and their uses. Likewise, teachers in adult multicultural classrooms must learn to "decode" the linguistic patterns used by students approaching them not as substandard forms of English but as other forms possessing all the factors necessary for language-making.[57]

ON MAKING THE CONNECTION BETWEEN ORAL AND WRITTEN LANGUAGE

The importance of discussion and other oral pre-reading activities is supported by the research evidence, which underscores their significance in:

-Activating and expanding the students' knowledge base which is essential to meaningful reading. [Researchers Johnston and Pearson, among others, want us to know that "background knowledge about a topic, particularly understanding key vocabulary, is a better predictor of text comprehensibility than is any measure of reading ability or achievement.[58]]

-Increasing retention of information by internalizing facts that occur when formulating opinions based on them

-Decreasing the tendency of students to become isolated with their texts

-Increasing student interaction thereby tapping different affective and cognitive bases and providing for cross-cultural communication which can result in enriched language exposure.

-Attaching the act of reading to an adult activity i.e. dialogue and attempted persuasion

-Reinforcing the use of books (and other print materials) as resources for information[59]

Discussion also gives instructors an opportunity to learn about students' experiences and knowledge providing them with an

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[57]Frank Smith in Understanding Reading,4th Ed. Hillsdale, NJ, L. Erlbaum Associates: 1988

[58]quoted by Joan E. Heimlich and Susan D. Pittleman in Semantic Mapping: Classroom Applications. International Reading Association, 1986.

[59]Donna E. Alverman, Deborah R. Dillon and David G. O'Brien in Using Discussion to Promote Reading Comprehension. International Reading Association: 1987.

educative treasure store, using the following techniques:

The initial presentation of ideas and situations is done with the aid of graphic, pictographic or teacher-read material. Following the presentation, the teacher facilitates an open-ended discussion of the concept(s) at-hand. This discussion will generate thoughts and feelings as well as language; this should be an evocative experience in which learners feel free to speak and make associations in an "authentic voice." It is essential that the teacher not avoid topics/expressions which are uncomfortable to him/her. We must, take Jonathan Kozol's advice to

> ...Dig down deep into the deep soil of those incipient concepts, dreams, longings and ideals of those rich vocabularies which already exist in the consciousness of even the most broken and seemingly silent of the poor.[60]

As a lexical guide, the teacher adds to this dialogue by soliciting and explaining and using this emotion-laden "word bank" to provide sight word and phonetic instruction.

The Language Experience Approach takes off from the above by using the oral language, rich in descriptive words and phrases, to compose written language. While students dictate the contents of the writing, the teacher acts as scribe, encoding their speech. Once done, the students learn to read and then write what they have composed.[61]

This approach should in no way be viewed as an intention to limit the learner to the immediacy of his/her environment. On the contrary, the purpose here is to use what is immediate to gain skills and attitudes which will beg far larger questions in far wider contexts. What this perspective on teaching does do is acknowledge, in a concrete way, how learning takes place. Learning, writes Kenneth Goodman in A Whole Language, Comprehension-Centered Reading Program,

> develops from familiar to unfamiliar, from vague to abstract, from gross to fine, from highly contextualized to more abstract... [students should] read familiar meaningful wholes first ... easily predictable materials that draw on concepts and experiences .... as they acquire a repertoire of such known wholes they begin to be able to read familiar words and

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[60]Jonathan Kozol in Prisoners of Silence. NY, Continuum: 1980.

[61]an easy to use guide to using Language Experience is Using Language Experience with Adults - A Guide for Teachers, by Katherine Kennedy and Stephanie Roeder; Syracuse, NY, New Readers Press, 1975.

phrases in new wholes and eventually unfamiliar parts in familiar uses.[62]"

As an extension of this activity, students with the assistance of the teacher may "edit" and enhance what they have previously written. [This provides a "natural" opportunity for learning word processing skills.] This also sets the stage for learners to participate in the production and publication of their own learning materials, a notion supported by the following rationale set out by the Toronto-based East End Literacy project:[63]

1) It ensures that a program maintains its learner-centered focus
2) It helps to demystify print and break the monopoly of knowledge.
3) Learners develop useful and necessary skills of writing, editing and publishing.
4) Those who feel shy and lonely become involved in a group and find some aspect of the work that they can do.
5) There's excitement in the discovery that print is a tangible and public way to express and disseminate one's ideas.
6) The materials created and produced by the learners represent a gathering place of information that's relevant to their needs and interests.
7) Each person's story is an intimate expression of concerns and experiences that can be shared. It is often easier to write your story than to tell it. Seeing your ideas in print substantiates and also creates a sense of objectivity.
8) The learners' materials reflect activities and situations that are a part of the community in which they live. often, there's a feeling of seeing one's life and neighborhood with new eyes.
9) By producing and publishing their stories, people become participants in a world of literacy that has excluded them.

ON SEQUENCING

Rather than prescribing a set order of skills to be learned, practiced and mastered, this curriculum suggests that instructors

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[62]Kenneth Goodman and Yetta Goodman in Whole Language Comprehension Centered Reading Program. Arizona Center for Research and Development, University of Arizona, February 1981.

[63]From "Breaking the Silence: Producing Student Writings in a Community Setting," in Convergence, "Literacy in Industrialized Countries, part 4," 1987.

monitor and document individuals' progress in skills areas as they encounter, use, and incorporate them in the process of reading, writing and computing for purposes assigned by them. This takes careful attention by the teacher but is in keeping with what researchers such as Frank Smith, Dorothy Strickland, and Yetta and Kenneth Goodman tell us about the "natural" acquisition of these skills facilitated by print immersion, and the learner's need to know.[64]

The only sequence which exist is that related to the practice and development of critical thinking skills. It should be noted that all lesson sequences culminate in the engagement of students in demonstrating synthesis through activities/projects that require them to assert their knowledge as they move towards controlling the larger sphere of their individual and collective lives. Therefore, it is imperative that lessons provide opportunities for students to form judgments, making decisions that will help them understand and function in their occupational, social and familial environment. Informing this process are the personal values which they have been able to identify and affirm in the process of dialogue with others.

The ability to form judgments and to make one's own decisions is developed by:

-recognizing personal and cultural values
-comparing one's own cultural values with those of others
-affectiveness

As we have asserted throughout, the affective and cognitive processes maintain a very close relationship, together making a whole. It is through the cognitive process that the adult learner develops the ability to access and express information that develops their attitudes and behaviors. These, in turn, serve as the motivational base for the development of cognitive learning.

The processes towards affective development are as follows:

Receptivity: An attitude of attention, including tolerance, that the adult learner shows towards people, things, situations and actions.

Inclination: Disposition of the adult learner towards people, things, situations and actions

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[64]Kenneth and Yetta Goodman, A Whole Language Comprehension-Centered Reading Program; Frank Smith, Understanding Reading; Dorothy Strickland and L.M. Morrow, "Developing Skills: An Emergent Literacy Perspective," in The Reading Teacher, October 1989.

which he/she perceives as valuable.

Appreciation: Active attention to and acceptance of their own and others' values

Self-realization: Integration of and intentional reference to formed values as part of a way of living, assuming the consequences of these lived beliefs.

LESSONS PUT IT ALL TOGETHER

Together Academic Areas, informed by curricular goals and made immediate through the themes generated by looking at self, family and community make lessons. These lesson activities are designed so as to encourage the elements discussed above: creative/expressiveness, critical thinking and multicultural interaction.

The lesson consists of four main parts that need to be considered together; these are (1) objectives, (2) materials, (3) procedure, and (4) evaluation.

OBJECTIVES: These are based on goals and help the teacher to determine the affective-cognitive processes, as well as the learning activities contained in the lesson. These objectives are developed within the academic/thematic areas, becoming concrete.

MATERIALS: Likewise, materials (book, video, "realia,"[65] folktale, newspapers, etc.) are chosen for their relevancy to both the cognitive and affective/identity development of the individual. Because we reject the skills based models as not only ineffective instructionally but wrong-headed in their implicit deficit-view of learners, we choose "whole language" and "content rich" material.

PROCEDURE: The procedure is a (more or less) sequenced plan of activities that are designed to lead the student, through his/her active participation, not only to acquire knowledge, but also to develop specific abilities. In the learning activities, the contents (knowledge) and abilities (skills) are closely related, and led (but not limited) by the social uses of this knowledge/skill by the student within their culture.

It is imperative that we plan for an initial lesson period in which student interest and attention is awakened. Good motivation for learning will create the psychological

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[65]"realia" refers to material from the "real world" e.g. menus, bus schedules, news articles, product labels. etc.

conditions and environment required for an authentic and efficient learning process. In this curriculum we recognize the importance of relating all new learning to immediate concerns and interests of the students thus facilitating not just cognition but the development of ethnic/cultural identity.

Methods used in the course of this instruction are both inductive, going from the particular to the general and deductive, going from the general to the particular, e.g. cause to effects. Dialogue is integral to these processes.

Learning activities should be presented to the adult learner in a systematic and ordered fashion with illustrations and graphics used as often as possible. We must not avoid discussing/presenting concepts but we must make them understandable.

In all activities, it is essential that the teacher is aware of the culturally-based values and learning styles of his/her students. (See the Lesson Plans for Multicultural Enrichment.)

EVALUATION: The main reason for evaluation is to monitor the development of knowledge, abilities and attitudes in the adult learner and, in this way, to be clear about next steps to be taken in the educative process. Done in a systematic and periodic way, i.e., at the end of the lesson, day, or learning unit, it should involve the learner in assessing academic progress as well as the educative process itself. In this way, evaluation contributes to the development of a dynamic and learner-centered pedagogy.

CHAPTER 5

APPROACHES TO THE ACADEMIC AREAS

LANGUAGE

As Margaret Atwell writes in Reading, Writing, Speaking, Listening: Language in Response to Context,

> language is always whole, is always social and exists only because communicators need a medium through which to connect ... readers are also speakers, listeners and writers and that be to any in of them means you will be all of them.

This curriculum is based on this idea of the unity of all means of communication which in this document is subsumed under the heading **Language Academic Area.**

Before we look at its component parts however, let us try to deepen our understanding of how we acquire language --specifically our native language-- and how that acquisition process relates to our subsequent acquisition of literacy skills.

As children we learn to speak because we are spoken to; we learn word order and word meaning because we are immersed in the use of it; we learn the appropriate use of different forms of the language by our practice with it in different settings and situations, including idiomatic/colloquial speech and intonation as devices that produce meaning as well as communicative relations. When we learn to read this "mother tongue" we apply our unstudied but precise linguistic knowledge (the rules that govern all language) to interpreting the written text.

As Frank Smith observes, reading is prediction. In attentive reading we predict word and sentence meaning because we are always "thinking ahead" of the print, expecting and confirming as we go. Once we acquire this skill through practice and more practice, we become readers. That is, we have learned how to get "print off of the page" and search for meaning. Once learned, we do not have to learn how to do this again no matter how many languages we learn subsequently.[66] Our knowledge of how oral and written language are related is established and, as such, transferrable.

Many beginning readers who are speakers of languages other than English have not only not learned to read English, they have, more significantly, not had the opportunity to acquire their first linguistic abilities or to translate these abilities into the act

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[66]Frank Smith, Understanding Reading.

of reading their language. This document advocates for instructional programs which do just that: develop first language literacy skills for non-English speakers. This follows the argument made by many bilingual educators[67] and clearly stated below by Felix Walters in Mary Burnett's ABC of Literacy:

> Every tongue... appropriately expresses the culture from which it arose and that of the people who use it. Each language constitutes the most convenient and surest instrument -- and perhaps the only one -- that can be used for learning about and properly understanding foreign cultures and languages.[68]

Krashen and Biber further point out that "it should be much easier for students to understand that language can be used for a variety of abstract purposes in their first language. Once students discover how their first language can be used to solve problems and help thinking, they can easily learn to use a second language in this way.[69]

As strong advocates for bilingual education, the both Krashen and Biber espouse the following reasons for their position:

-Primary language literacy facilitates the acquisition of english literacy skills and behaviors i.e. how to use literacy to access information

-Learning subject matter through the first language provides knowledge that helps make subject matter study in English more

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[67]Bilingual educators have consistently argued over the years that students who are dominant in their native language should be taught literacy skills in their native language first while oral language skills are being developed in the second language (in the U.S., English). Generally, that is the practice in a good bilingual program. After native language proficiency is strengthen, then academic skills in English are taught. Bilingual programs that follow a multicultural/ pluralistic model will continue to teach subject content in both the native language and English even after students have attain English language proficiency. The goal of such these programs is to promote bilinguality, as opposed to acculturationist models that seek to suppress the student's native language.

[68]quoted in "Mother Tongue Literacy: The Importance of Learning to Read and Write in One's Mother Tongue," Meshack J. Matshazi in Convergence "Literacy in Industrialized Countries,part 3" : 1987.

[69]Stephen Krashen and Douglas Biber in On Course - Bilingual Education's Success in California. Sacramento, California Association for Bilingual Education:1988.

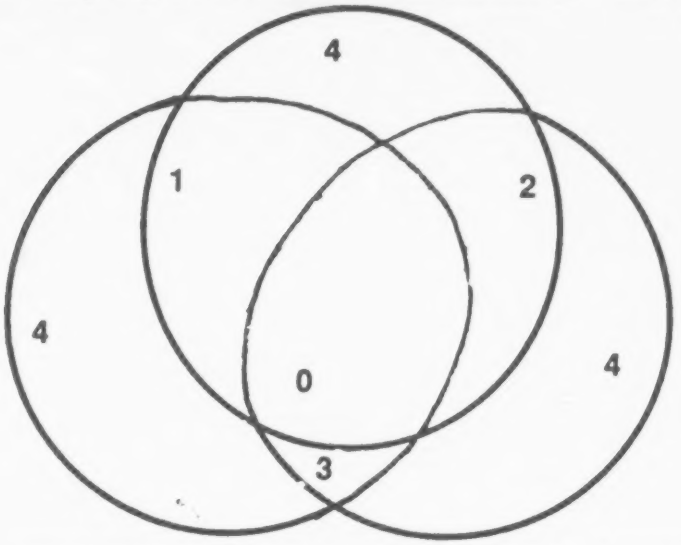
comprehensible.

-In a multicultural society, bilingualism can lead to practical, career-related advantages.

-Bilingualism can result in superior cognitive ability developed while learning to manipulate language.

-Bilingual education can develop a healthy sense of biculturalism while avoiding "bicultural ambivalence."

Just as we can not assume that literacy skills have been acquired in the learner's first language, we can not assume that learners are familiar with Roman alphabet systems. The following schematizes the varying needs for instruction in this area:



Area 0 represents all those non-literate learners from all over the world; they need full instruction in listening, speaking, reading, writing and Math

Area 1 represents those non-literate learners from Laos, China, India, Assyria,Khemer, Japan, Korea, etc. Their alphabets are totally different from English. They need full instruction in oral and written English language.

Area 2 represents those learners from Vietnam, Russia, Laos (some Hmong), etc. They are somewhat familiar with the Roman alphabet. They need more instruction in oral v. written language.

Area 3 represents those learners from Spain, Mexico, France, Romania, Greece, etc. They know and use the Roman alphabet and have languages with roots shared

by English

Area 4 represents all beginning learners who have acquired English proficiency]

Jimmie Durham, in his introduction to his volume of poetry, Columbus Day, extends our understanding of how class and origin affect not just our choice of language but **how** we use language:

> The English language is clearly divided by class, wherein one can find three or four words that mean the same thing, but each will be used predominantly by a single class. That is how we know if someone is "educated" or not; by their ability to use big words. When working-class people scorn that pretense, they are accused of being 'philistines' or anti-intellectual. There can be, though, a subtlety and a complexity of thought that is kept out of the vocabulary of working class people. American Blacks were very quick to discover that fact and to re-invent English for themselves....
>
> Our own Indian languages are extremely subtle and exact, as language must be in a preliterate society in which the community relies on the spoken word. While our languages no longer predominate in our own communities, and we no longer live in preliterate societies, saying the right thing in the right way is still very important to us.[70]

ON READING

The task for community-based teachers of non/low-reading adults is to make reading instruction accessible and valued in a way defined by the needs and desires of the learners of that community. As Freire suggests, adult illiterates who must "read" reality to survive are on the threshold of literacy by doing so.[71] It is up to the teacher to glean from that reality "codification" (verbally or pictorially presented themes which hold meaning) which will generate discussion and thereby vocabulary and the phonetic symbols which "encode" this reality into print (discussed more fully in the previous chapter).

Literature, as well as learner produced and environmental text, is used for reading practice because it (1) introduces readers to the world beyond their immediate grasp which is a goal as much as any other, (2) it develops the readers' understanding of the act of reading as communication across space and time

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[70]Jimmie Durham in Columbus Day, Minneapolis, West End Press:1983.

[71]Paulo Freire, Pedagogy in Process - letters to Guinea Bissau. Seabury Press, 1978.

thereby developing their abilities at abstraction while drawing of their nascent powers of imagery, and (3) it demonstrates the difference between spoken and written language as well as the differences between expository and narrative writing (the former being the language of academic pursuits), all of which, having been modeled, can be transferred into their own writing[72].

The literature which is derived from the cultural heritage of learners should be explored and its use encouraged. Eduardo Galeano speaks of this in terms of Hispanic authors and readers.

> What process of change can activate a people that doesn't know who it is, nor from whence it comes? If it doesn't know who it is, how can it know what it deserves to become? Cannot literature aid, directly or indirectly, in this revelation? It seems to me that the possibility of contribution depends to a large extent on the level of intensity of the writer's responsiveness to his or her people - their roots, their vicissitudes, their destiny - and the ability to perceive the heartbeat, the sound and rhythm, of the authentic counterculture, which is on the rise..
>
> I think that a primordial function of Latin American literature today is the rescue of the word... by writing it is possible to offer, in spite of persecution and censorship, the testimony of our time and people - for now and for later. One may write as if to say: 'We are here, we are here; we are thus, we are thus.' In Latin America a literature is taking shape and acquiring strength, a literature that does not lull its readers to sleep, but rather awakens them; that does not

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[72]Two articles which discuss the differences between narrative and "essayist" text, i.e. writing for personal v. academic purposes, are: "The Struggle for Voice: Narrative, Literacy and Consciousness in an East Harlem School," Michele Sola & Adrian T. Bennett, in Journal of Education, Vol. 167, No.1, 1985, and "Discourses of Power, The Dialectics of Understanding, the Power of Literacy," Adrian T. Bennett in Journal of Education, Vol. 167, No.2, 1985.

> propose to bury our dead, but to immortalize them; that refuses to stir the ashes but rather attempts to light the fire. This literature perpetuates and enriches a powerful tradition of combative words.[73]

We must stress the importance of a content-rich, whole language approach to reading instruction also in order to make a clear and pedagogically sound break with learners' experiences with reading failure. Patrick Shannon[74] suggests the following guidelines which, according to him, are usually reserved for "high ability" students:

> -Decreasing the individualization of reading activities to allow for collaborative work
>
> -Decreasing phonetic exercises, oral and teacher-interrupted reading in order to emphasize meaning-making as the object of reading, thereby encouraging readers to rely on context and other strategies which are alternatives to the word-by-word approach that has disabled their reading abilities[75].

ON WRITING

In our literate society, writing is what brings all forms of communication and all subject disciplines together. We can imagine or speak of interconnectedness, but we can not see them until they are "made visible". It is in the process of writing (encoding speech and thought) that skills, attitudes and processes are refined and, if transferred to other areas, will result in achievement there as well. To be more specific:

> -Writing forces us to understand what we are expressing; it forces precision, organization and clarity. Likewise, once written, the information, viewpoint or scene **belongs**, as it were, to the writer developing mental clues that he or she will need to retrieve at some other date.
>
> -Writing provides an opportunity to understand new ideas. Unlike speech, "writing involves formulation and permits formulation; it is one of the best ways to create and record one's stories, to discover what one thinks, to discover the

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[73]Eduardo Galeano, "In Defense of the Word: Leaving Buenos Aires, June 1976," in Multi-Cultural Literacy, Ed. by Rick Simonson and Scott Walker; St. Paul, MN, Graywolf Press: 1988.

[74]Patrick Shannon, "Reading Instruction and Social Class."

[75]Gary and Nancy Padak, "Guidelines and a Holistic Method for Adult Basic Reading Programs," in Journal of Reading, March 1987.

dynamics of one's mental mode."[76] It is the most private form of communication; writing allows us to say anything anyway we want and then change it if we choose. This liberty creates possibilities for what Ira Shor and others have termed "transcendent thinking," i.e. creative problem solving. We are, in fact, forced by the act of writing to find closure; we can find it in summary, hypothesis or the proposition of leaps of faith.

-Writing, as teenage diary keepers, letter writers and poets can tell us, provides us with a unique kind of opportunity to know ourselves. As Edouard Lindemann wrote in The Meaning of Adult Education, "knowledge of the self discloses what the self is capable of expressing."[77] Used for self-expression, writing can literally be held up by writers, thereby holding themselves up for closer examination.

-Taught well, writing can validate the oral language of the writer, the oral language being our mother tongue and native form of expression. Psycholinguists have written at length about the importance of language acceptance to cultural identity and ego development. Writing captures the oral traditions of beginning readers, thereby affirming them, their experience, language and culture.

-In a more immediately useful vein, writing allows adults to use language for adult purposes i.e. "allowing students to use newly acquired skills in true-to-life situations demonstrated the practical uses for what they have learned," thereby internalizing the importance of the skill and its mastery.[78]

-Writing encourages activity as opposed to passivity in learning, whether that activity is for functional or expressive ends, for clarity, summary or synthesis. "Adult education," we are reminded by Lindemann, "is devoted to the task of training individuals in the art of transmitting experiences into influence ... the adult learner becomes a spokesman for ideas."

To summarize, writing is an act of concretizing thought and information, of bringing together isolated skills into an active whole. In writing we produce a tangible product which can then be

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[76]Gerry H. Brookes, "Exploring the World Through Reading and Writing," in Language Arts, Vol. 65, No. 3, March 1988.

[77]Edouard Lindemann, The Meaning of Adult Education, New Republic Printers: 1926.

[78]Karen N. King, "Mediate and Educate" in Lifelong Learning, September 1987.

held up for further examination and development. Because it is visible, we are able to "interact" with it.

But to make this work - to see the words, to make connections, encode experience, portray feeling and opinion, and connect to speech, the process must be "given back" to the writer. He/she cannot feel free to "think out loud" if he/she is concerned about where the next comma goes or how to spell the word which perfectly expresses a thought. Grammar, punctuation and usage must be taught and should be learned if for no other reason than to ensure the writer a good and serious reading. These are mechanics which, like everything else, can be learned and will be learned once there is a meaningful reason for doing so.

Peter Elbow speaks of this in Writing Without Teachers:

> Editing, in itself, is not the problem. Editing is usually necessary if we want to end up with something satisfactory. The problem is that editing goes on at the same time as producing. The editor is, as it were, constantly fiddling with what he's doing while he's in the middle of trying to do it.[79]

From the outset, we must attach writing to reading to speaking to communicating. From day one teachers should encourage the habit of writing to internalize and understand information, i.e. note taking. From the first lesson, we should encourage language by first encouraging the use of the students' oral language so that they will see the connection between it and written language.

At the literacy level, this "writing" must be done by the instructor using a Language Experience method, but the expression must always be the students'. To give "voice" to students we must enable them to "hear" themselves on paper.

Our goal is to engage the student in his/her world while engaging their abilities. The possibilities are endless. Journal writing, responding to literature,[80] interviewing, are just a few of the activities which can begin as soon as readers can write, if only phonetically. Let them explore what can happen without the "editor standing over their shoulder," when they are empowered to tell their story, feelings, views, in their own voice.

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[79]Peter Elbow, Writing Without Teachers, Oxford University Press, 1973.

[80]for guidance on this see Julie E. Wollman-Bonilla, "Reading Journals: Invitations To Participate in Literature" in The Reading Teacher, November 1989.

At this point good expressive writing must be emphasized and nurtured by the instructor, thus pushing the student beyond their current ability. The following list of "Good Writing Qualities" is offered as a guideline:

The Qualities of Good Writing
(adapted from: George E. Rutledge, Write for Life Program)

1. Meaning - There must be content in an effective piece of writing. It must add up to something. This is the most important element in good writing.

2. Authority - Good writing is filled with specific, accurate, honest information. The reader is persuaded through authoritative information that the writer knows the subject.

3. Voice - Good writing is marked by an individual voice. The writer's voice may be the most significant element in distinguishing memorable writing from good writing.

4. Development - The writer satisfies the reader's hunger for information. The beginning writer almost always overestimates the reader's hunger for language and underestimates the reader's hunger for information.

5. Design - A good piece of writing is elegant in the mathematical sense, It has form, structure, order, focus, coherence. It gives the reader a sense of completeness.

6. Clarity - Good writing is marked by a simplicity which is appropriate to the subject. The writer has searched for and found the right word, the effective verb, the clarifying phrase. The reader should be able to see through the writer's style to the subject which is clarified and simplified.

The revision of writing can also be viewed as an opportunity for practicing critical thinking skills wherein the writer must compare their intentions and goals with what they have written, consider alternatives if there is dissonance and make decisions that will resolve any problems.[81]

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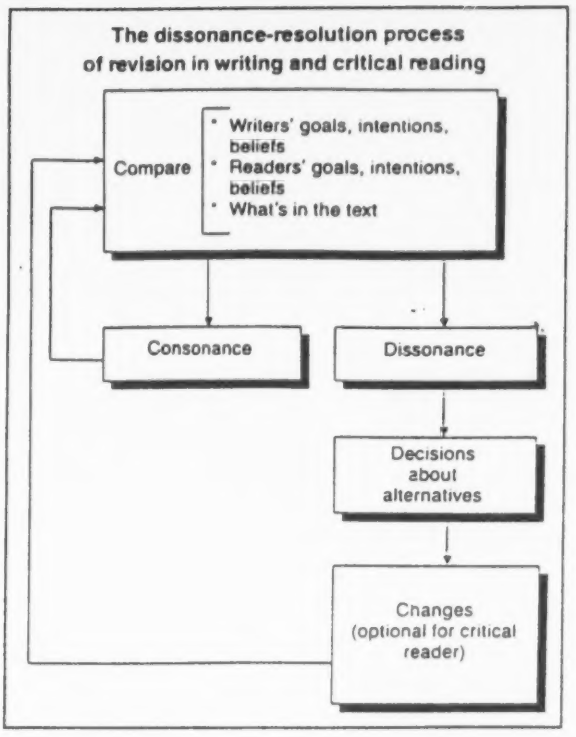
[81]idea and graphic from: Jill Fitzgerald, "Enhancing two related thought processes: Revision in writing and critical reading" in The Reading Teacher, October 1989



Grammar and Usage skills are taught effectively as writers assume the role of editors, motivated by their intrinsic desire. As can be seen from the following figure, "proof-reading" is the final stage of writing:

At the "final stage" the following should be attended to:
[Adapted from: Sally Borengasser, English Writing and Language Skills]

1. The writing's presentation (its appearance) does not detract from its content.

2. Sentence structure is accurate. There are no fragments or run on sentences. Punctuation is used correctly to link compound sentences.

3. Singular verbs are used with singular subjects and plural verbs with plural subjects (unless non-standard syntax is intended).

4. All pronouns have clear antecedents. Plural pronouns are used to refer to plural nouns, and singular pronouns are used with singular nouns.

5. Pronouns are the correct subject or object form.

6. Singular pronouns such as either, each, anybody, everybody, or nobody are used with singular verbs.

7. The writer uses verb tense consistently and accurately.

8. The writer avoids unnecessary shifts in pronouns, such as I to you or they to you.

9. Confusing verbs e.g. sit/set, leave/let are used correctly (again, depending on colloquial intent).

10. The endings -s,-'s,-ing,-ed are used correctly with nouns and verbs.

11. Participial phrases, prepositional phrases and dependent clauses are clearly attached to the words they modify.

12. Capitalization is used correctly at the beginning of sentences and with proper nouns and adjectives.

13. Each word is spelled correctly

14. Punctuation is used correctly at the beginning of sentences, proper nouns. and adjectives (e.g. English class).

15. Contractions such as they're, it's or you're are not confused with possessive pronouns.

16. Confusing words such as father/further, fewer/less or sound-alikes are used and spelled correctly.

17. Dialogue is punctuated and capitalized correctly.

MATHEMATICS

In approaching the academic area of mathematics, the adult educator needs to consider (1) how the student may use math in their home, community and/or work life and these uses may be culturally prescribed and (2) how careful and well-timed use of concrete objects and demonstrations can both elicit prior knowledge from the learner while imparting new and relevant skills.

As to the first point, Alan J. Bishop, discusses Mathematics as a "cultural product" (as opposed to the "universal language" it is commonly thought to be), by looking at the six fundamental activities for which mathematical knowledge is necessary in all cultures:

Counting - the use of a systematic way to compare and order discrete phenomena:

numbers, number patterns, number relationships and systems, algebraic representation, infinitely large and small, events, probabilities, frequencies, numerical methods.

Locating:	exploring one's spatial environment and conceptualizing and symbolizing that environment with models, diagrams, drawings, etc.:
	position, orientation, development of coordinates, latitude/longitude, bearings, angles, lines, networks, loci, rotation, reflection
Measuring:	quantifying qualities for the purposes of comparison and ordering, using objects or tokens as measuring devices with associated units or 'measure-words':
	comparing, ordering, length, area, volume, time, temperature, weight, development of units - conventional, standard (e.g. music), measuring instruments, estimation, approximation, error
Designing:	creating a shape or design for an object or for any part of one's spatial environment:
	properties of objects, shape, pattern, design, geometrics, congruence, ratios
Playing:	devising, and engaging in, games and pastimes, with more or less formalized rules :
	puzzles, paradoxes, models, games, rules, procedures, strategies, prediction, guessing, chance, hypothetical reasoning, analysis
Explaining:	finding ways to account for the existence of phenomena, be they religious, animistic or scientific:
	classifications, conventions, generalizations, arguments, logical proof, figural explanations - graphs, charts, diagrams, matrices

Having thus looked at mathematic activities, Bishop then postulates that "a curriculum which is structured around [these] activities would allow the mathematical ideas from different cultural groups to be introduced sensibly... a culturally fair mathematics curriculum - a curriculum which would allow all cultural groups to involve their own mathematical ideas whilst also

permitting the 'international' ideas to be developed.."[82]

Along with this, it is important that in discussing the history of mathematics, non-European origins and developments be included.

Although many learners need additional opportunities to improve their skills within a formal learning process caution against "skills based" instruction is warranted. Recent research emphasizes instead the teaching of mathematical **thinking**, e.g. problem solving, within real-life contexts.

> "In a country filled with insurance companies and rife with lotteries, it isn't safe to go out without a rudimentary understanding of statistics. Astrologers get rich off people who don't understand that by the laws of probability, someone who makes enough predictions will be right some of the time."[83]

Underscoring this point, Marilyn Frankenstein includes in her article, "Incorporating Race, Gender and Class Issues into a Critical Mathematical Literacy Curriculum,[84]" many examples of "using statistical data to reveal and explode all the sentences and myths that are slipped into our lives in so many ways." These include infant mortality reports, income-by-race figures, health care information from Cuba. An explicit purpose of the mathematics curriculum is to empower students by teaching them to critically interpret data.

Efforts to improve mathematics programs frequently focus on revision of the curriculum. It has been argued by some that the fundamental variable in mathematics program improvement is instruction. According to the former United States Commissioner of Education Harold Howe II, "The improvement of pedagogy is the most likely source of a real solution to the shortcomings of America's schools." Chambers (1987) in Effective Teaching of Mathematics lists the characteristics of effective math instructors as identified in the literature (for example, What Works: Research About Teaching and Learning , U.S. Department of Education, 1986). These characteristics are further supported by studies specific to the teaching and learning of mathematics. There is strong support for direct, instructor-centered whole group instruction, and the following recommendations can implemented within that framework.

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[82]Alan J. Bishop, Mathematics Education in its cultural context, Educational Studies in Mathematics, 11(2).

[83]from "Creating Problems" in Newsweek Special Issue: Education:A Consumer's Handbook, 9/90, Vol.CXVI, No.28.

[84]Journal of Negro Education, 59 (3), 1990

Effective Instructors:

-keep students on task.

Effective instructors make full use of the allocated time, keeping students successfully engaged in mathematics throughout the period. These instructors begin promptly at the beginning of the period and deal with homework assignments quickly and efficiently. Researchers Thomas Good, Douglas Grouws, and Howard Ebmeier (1983) found that it is beneficial to begin class with a brief statement reminding students of the work they did the day before, move quickly through the homework (in five minutes or less), and then complete a few minutes of "mental mathematics" before moving on to the development of new material.

-devote half the class time to new material.

Instructors should engage in active, careful, and meaningful teaching of new concepts, thus aiding students in comprehending the new material presented. Activities which focus on comprehension include: (a) instructor explanations and demonstrations; (b) use of concrete examples in order to abstract common features; (c) making comparisons and searching for patterns; and (d) class discussions. Students need a clear understanding of what they are doing and reasons for doing it.

-review skills.

Effective instructors introduce the development with a review of previous skills and concepts that will be incorporated into the development. This recognizes that student are not blessed with total recall and will not remember all the ideas needed to develop the new material. By reviewing first, the continuity of the development of new material is not interrupted.

-stress concepts and relationships.

Effective instructors develop an understanding of concepts and relationships rather than rely on demonstrations of homework examples. Concept development is enhanced by the use of manipulative materials, pictures, and diagrams. Students should be actively involved. Rather than rely on lectures that encourage passive learning, effective instructors continuously involve students in activities and discussion.

-emphasize higher order thinking skills.

Effective instructors emphasize higher order thinking, problem solving, and estimation skills in class.

-ask process questions.

Effective instructors ask more questions, especially process questions that require students to give an explanation as part of their answer. These instructors allow adequate wait-time after a question and frequently ask follow-up questions after correct answers are given. Effective instructors assess student comprehension before leaving the development portion of the lesson. Comprehension can be assessed by asking product questions (those requiring an answer but no explanation) as well as process questions. To assess comprehension, questioning should be directed to those students who are least likely to understand. Another strategy is to use controlled practice in which all students do one problem like the homework problems. The instructor can check understanding as students work, assigning a second problem if students perform well on the first or if more time is needed to monitor students.

-monitor understanding.

Effective instructors do not move ahead to independent practice and homework until they have evidence that students will be successful. If only a few students are having trouble, their needs can be addressed privately or in small groups. Otherwise independent practice should be deferred and lesson development should continue. Reteaching the next day may be necessary.

Effective instructors use distributed practice to develop and maintain competence. Concepts learned during the lesson are practiced in class before the end of the period to consolidate learning. Those concepts are reviewed again as homework and are reviewed again the next day. Regular and monthly reviews encourage students to maintain the competence they have developed.

-use a variety of structures.

Instructors philosophically committed to individualized or small group instruction and who are effective using that approach should not be compelled to switch to teacher-centered whole group instruction. There is some evidence that working in small, mixed-ability groups can enhance student achievement. One way to do this is to use instructor-centered whole group instruction for the development of the lesson and then use small mixed-ability groups for the independent practice.

Implementing only one or two of the suggestions above is unlikely

to produce significant changes in the performance of pupils of marginal teachers. As Carolyn Evertson and others (1980) point out, "Effective teaching is not the mastery of a few skills, it is the orchestration of a great many skills into a coherent system that meets the needs of the class."

[See the appended Bibliography for Multicultural Mathematics Teaching for primary sources discussing this topic in greater depth.]

CULTURAL STUDIES

The goal of social studies education is to provide the student with the knowledge necessary to interpret and intervene in their immediate and global community. As a by-product this knowledge creates the background information necessary to reading and comprehending content-based information whether found in a text, newspaper, report document or literature.

Social Studies instruction must be inclusive in nature -

presenting to students the whole of history not simply the recorded history of the powerful.While European History has in many ways shaped World History, there is an underbelly to that truth; one approach would look at the interplay between European expansionism and its affect on the history/politics/economics/geography of non-European nations and continents.

Social Studies education should provide the tools for looking at history -

providing concepts and language for understanding anthropology, geography, political science and economics enable students to critically examine historical events; in doing so they should be encouraged to look at today in light of the past -at now as a contiuum of yesterday. Because adult learners are constantly impacted by information from mainstream sources, they should be taught how to inquire about discover, and evaluate that information in terms of validity and consequence.

CHAPTER 6

GENERATIVE THEMES AND COURSE OUTLINES

This chapter contains a listing of generative themes which can be used to organize instructional lessons, and the more specific course outlines designed to encompass an expanded core curriculum.

Thematic contents of these academic areas concern those experiences that have immediate meaning of ascending importance, i.e., self, family and community. In general, materials are studied and presented in a manner which moves from the known to the unknown and from most recent experience to historic roots.

Guided by these themes, which should run throughout the teaching of academic areas, learners are encouraged to generate topics of interests for further/specific exploration, e.g., language (including bilingualism), ethnicity/race, education and educational systems, economics within the family, community and marketplace, employment, racism and prejudice, the community and government.

STUDENT OBJECTIVES CORRELATED TO CURRICULAR GOALS

I. SELF AFFIRMATION AND CULTURAL AWARENESS GOALS:

A. To provide opportunities for learners to recognize their experiences as a source of learning.

B. To assist learners in coming to value their own and others' culture. To understand the concept of "culture" and be able to recognize "mainstream culture" and its impact on them as individuals and group members.

C. To facilitate the acquisition of reading, written and oral communication skills, analytical and computing skills, and critical activity around these skills.

Objectives:

1.1 Discuss, read and write about the relationship and importance of family, work and educational experiences to learners lives.
1.2 Discuss, read and write about "culture" and "cultural values" and their importance in learners' lives.
1.3 Using interviewing and other methods, gather information about other class members' cultures.
1.4 Compare and contrast cultures. Find cross cultural similarities and differences.

1.5 Discuss, read and write about prejudicial/culturally insensitive practices. Understand their root causes and suggest some solutions.
1.6 Improve oral communication skills using discussion, interview, oral argument and presentation techniques including storytelling and speech making.
1.7 Compose and read language experience narratives on education, child rearing, family life, neighborhood and community, etc. on an individual and class basis.
1.8 Share writings with others, classmates, and basic skills students in other classrooms and programs.
1.9 Discuss the need for peer-counseling/support groups (or other collaborative project) and develop implementation plan.

II. INQUIRY, CRITICAL THINKING AND PROBLEM SOLVING GOALS:

A. To increase the development of skills of inquiry; to develop questioning about the immediate and "greater" world."
B. To develop critical thinking skills to enable learners to process, communicate and use information.
C. To provide real and hypothetical situations in which students use skills of inquiry and analysis to solve problems while developing and practicing basic academic skills.

Objectives:

2.1 Discuss, read and write about the community (neighborhood, cultural group, city).
2.2 Decide what is and is not known; formulate questions about what is not known and/or understood.
2.3 Learn about resources in the community by reading, hearing speakers, viewing audio-visual material, etc; determine their usefulness to self, family and community; learn and practice how to use them.
2.4 Use resources to get answers to questions both oral and written.
2.5 Learn classification skills to categorize information learned: (1) decide which resources are alike, (2) sort resources according to likeness, (3) assign sorted groups category names, (4) place similar categories together/ smaller within larger. [Note: A resource directory for the class can be made from this information gathered by students.]
2.6 Compare and contrast information in order to discriminate between resources addressing real and ascribed problems; discover and discuss myths used to "explain away" problems. Understand the relationship between different types and sources of community information e.g. formal vs. informal, government vs. community-based. Evaluate

the relative value of each.

2.7 Read, write and discuss "urban problems," using classification and comparing/contrasting skills

2.8 Discuss and write about resources that do not exist, and why they are needed.

2.9 Share information with community members and engage them in discussion using written and/or oral means.

2.10 Learn about and discuss problem solving methods and their appropriateness in solving different problems.

2.11 Read, write and discuss problem(s) identified in 2.4 and 2.5. Define and act upon using appropriate problem-solving method.

III. CIVIC, SOCIAL AND ECONOMIC AWARENESS GOALS:

A. To provide experiences outside the classroom that will facilitate and expand learning in the areas of civic, social and economic life.

B. To encourage active and effective citizenship.

C. To teach skills related to information accessing and provide real-life opportunities for practicing the same.

Objectives:

3.1 Participate in field trips suggested by teacher and class.

3.2 Learn about and locate community-based sources of information (social service agencies, health, legal organizations, libraries, etc.)

3.3 Discuss, read and write about civic life. Using mapping and other classification techniques, determine which community resources/entities contribute to civic life. Choose various of these to study and report on in written/oral fashion.

3.4 Discuss, read and write about social life; determine what contributes this. Choose various of these to study and report on in written and oral fashion.

3.5 Discuss, read and write about economic life; determine which resources contribute to this. Choose various of these to study and report on in written/oral fashion.

3.6 Understand the relationship between these local spheres of life" and the state/national government and economic system.

3.7 Discuss the impact of these "spheres" on individual, family, culture, neighborhood.

3.8 Articulate this understanding to elected officials, business leaders, community advocates, church people via oral and/or written communication. Drama, publication, oratory, and video production should all be considered as possible means of expression.

3.9 Learn to read maps, bus schedules, tables, directories, etc.

3.10 Learn to complete applications for employment, library card, banking, etc.
3.11 Develop skills in government/business specialized vocabulary.

IV. ACADEMIC AND CAREER SKILLS GOALS:

A. To prepare learners for entry into higher level learning programs, occupational programs and/or employment, technical literacy.
B. To give learners opportunities to assess their learning/career goals and interests.
C. To teach learners how to read, compute, write and speak for job readiness.
D. To expand the learner's awareness of science and technology.
E. To expand the learner's awareness of the social, political and economic history of the community they come from or live in.
F. To provide an insight into the job market: how to get there/how to stay there; how to access information pertaining to the rights of employees, etc.

Objectives:

4.1 Introduction to computers: (1) identify basic computer terminology (2) describe different types of computers (3) demonstrate the fundamental operation of a computer (4) explain the steps in using different software (5) become familiar with keyboard and simple commands

4.2 Computers for Instruction: (1) demonstrate skills using the computer for focusing on specific instructional areas e.g. grammar, spelling, math (2) drill instructional areas in which practice is needed while also practicing computer skills (3) learn to monitor progress thus becoming more self-directed (4) participate in group study using computer for developing skills in logic and reasoning skills.

4.3 Common Information Technologies: (1) make a simple computer program (2) use a simple video recording device to make a program about computer technology and how it can help/hurt communities.

4.4 Computers and Society: (1) discuss some uses of computer technology in the workplace, community, government and home (2) compare and contrast the U.S. and the World before and after the introduction of computer technology (3) evaluate the impact of computerization on society.

4.5 Prepare presentations about past jobs and share using oral or written means; establish expertise.

4.6 Assess personal interest and skills in vocational areas.

4.7 Gather information about careers in those areas.

4.8 Discuss "what makes a good job" and contrast and compare researched careers for "work satisfaction factors."

4.9 Read, discuss and write about "wages, hours and working conditions", exploring protections granted by law and union membership.

4.10 Complete a variety of job applications and discuss job-seeking strategies.

4.11 Write a simple resume, memo, business letter, etc.

4.12 Compute wages and perform other job-related math functions using whole numbers, decimals and fractions

4.13 Read and hear about the current employment outlook and discuss skills needed for entry into the workforce and/or mobility within it.

4.14 Understand unemployment. Discuss its causes, its effects, and possible solutions considering unemployment and underemployment in the community.

4.15 Learn about and visit agencies which assist unemployed individuals find work.

4.16 Discover attitudes and psychological profiles employers seek in workers; discuss.

4.17 Tour places of work.

4.18 Learn about how higher education relates to high schools as sources and marketplace as goal.

4.19 Read and hear about opportunities in higher education.

4.20 Understand "credentialization" and its causes/agencies

4.21 Learn about agencies which assist individuals in higher educational, counseling, financial aid planning, etc.

4.22 Discuss what "going to college" would mean to individual as family member, community member.

4.23 Tour facilities with higher education offerings.

V. SELF DIRECTED LEARNING GOALS:

A. To promote self-directed learning, by assessing individual learning style/skill strength.

B. To develop study skills, habits and knowledge of resources which will promote independent learning.

Objectives:

5.1 Learn to analyze own academic status, identifying strengths and weaknesses of past and present educational experience(s) and attainment; Understand what "happened".
5.2 Learn about own learning style
5.3 Understand how classroom learning is same/different from other kinds of learning.
5.4 Compare personal educational values with values of others.
5.5 Write and educational goal statement and update on a periodic basis including what, if any, obstacles stand in the way and how they may be overcome.
5.6 Learn how to adjust skills to learning task and how to monitor comprehension.
5.7 Learn how and where to ask for assistance when needed
5.8 Establish habits conducive to accomplishing goals -short and long term.
5.9 Demonstrate the relationship between academic solutions and societal problems.

Basic Skills Course Outlines

The course outlines presented below are for:

Language I	Math I	
Language II	Math II	Reading II
Language III	Math III	Reading III

COURSE OUTLINE
Language I

GENERAL OBJECTIVES

1. To master letter-sound recognition.
2. To master written formation of the alphabet.
3. To develop an understanding of the relationship between spoken and written language.
4. To develop effective oral language skills.
5. To develop metacognitive strategies.
6. To build word knowledge.
7. To develop knowledge of grammatical structure and patterns.
8. To develop skill in composing words, sentences and paragraphs.
9. To develop critical thinking skills related to processing and communicating information.
10. To develop self-reflection, assessment and awareness.
11. To develop skills for job search and employment.

Instruction of reading, writing and speaking at this level should be an extension of the student's oral language. Using a holistic method encourages readers to make meaning from context rather than simply decode print. This course has combined objectives of English and reading to encourage language development. The instructional units below relate to a goals listed above and should NOT be presented as individual skills. The instructor should develop as many "teaching" units as he/she deems necessary to achieve the specific objectives.

Number	Instructional Unit	Specific Objectives
1.	Letter/Sound Recognition	1. Identify the letters of the alphabet. 2. Identify and pronounce the sounds associated with the letters. 3. Label vowels and consonants. 4. Identify long and short vowels. 5. Apply spelling rules that follow basic phonetic principles.
2.	Letter formation	1. Write the alphabet; upper and lower case (manuscript or cursive).

3.	Spoken/Written Language Relationship	1. Develop an understanding that spoken and written words represent ideas. 2. Develop written vocabulary based on personal experiences. 3. Use context to develop meaning. 4. Increase vocabulary through the use of synonyms and antonyms. 5. Develop fluency in Standard English.
4.	Oral Language	1. Relate ideas and experiences orally. 2. Develop the ability to speak extemporaneously. 3. Develop skill in organizing thoughts prior to speaking. 4. Participate in class and small group discussion. 5. Participate in a group discussion. 6. Discuss personal reactions to issues.
5.	Metacognition	1. Develop skill in sampling reading materials for content. 2. Develop skill in assessing background knowledge. 3. Establish a purpose for reading. 4. Develop skill in predicting content of text. 5. Develop ability to recognize relationships between elements of text. 6. Develop skill in confirming predictions. 7. Develop skill in combining background knowledge and text material to make inferences. 8. Develop skill in using graphic organizers.
6.	Word Knowledge	1. Develop word banks. 2. Use context clues to define unknown words. 3. Develop word attack

		strategies. 4. Read self-generated text.
7.	Grammar/ Mechanics	1. Develop skill in identifying nouns, verbs, adjectives and adverbs. 2. Label the subject and predicate of a simple sentence. 3. Compare usage in a variety of situations. 4. Develop skill in end of sentence punctuation. 5. Develop skill in comma and apostrophe use. 6. Develop skill in capitalization use. 7. Identify fragments and run-on sentences.
8.	Composition skills	1. Develop skill in composing thoughts prior to writing. 2. Identify complete sentences. 3. Compose complete sentences using basic sentence patterns. 4. Apply functional rules of punctuation in sentences. 5. Apply usage rules in specified writing assignments. 6. Compose complete sentences using basic sentence patterns. 7. Write dictated sentences. 8. Imitate sentence models of various lengths and styles. 9. Summarize printed materials. 10. Write personal responses to social issues. 11. Develop skill in analyzing personal writing for content and meaning. 12. Develop skill in analyzing personal writing

		for continuity.
9.	Critical thinking	1. Gather appropriate information for a given assignment. 2. Distinguish fact from opinion in summarizing.
10.	Self-direction	1. Assess personal attributes of self-directedness. 2. Identify social issues personally relevant. 3. React to social issues.
11.	Career awareness	1. Explore career options. 2. Summarize career information. 3. Orally present information on a career area.

COURSE OUTLINE
Language II

GENERAL OBJECTIVES

1. To further develop written and spoken vocabulary.
2. To develop knowledge of grammatical structure.
3. To develop skill in sentence composing.
4. To further develop oral communication skills.
5. To develop confidence in the ability to communicate.
6. To develop skill in copy editing.
7. To develop knowledge of career options.
8. To develop critical thinking skills related to communication.
9. To develop self reflection, assessment, and awareness.
10. To develop a personal response to social issues.

Number	Instructional Unit	Specific Objectives
1.	Vocabulary	1. Apply spelling rules, including those that follow basic phonetic principles. 2. Identify word parts (root, prefix, suffix, grammatical endings.) 3. Label word pairs (homonyms, homo- graphs, synonyms, antonyms.) 4. Apply context clues to new words. 5. Recognize multiple meanings. 6. Describe several approaches to developing vocabulary beyond the classroom experience. 7. Demonstrate vocabulary growth in written assignments.
2.	Grammar	1. Describe the functional pattern of the eight parts of speech. 2. Label the subject and predicate of a simple sentence. 3. List common usage rules for written communication. 4. List common usage rules for spoken communication.

		5. Compare usage in a variety of situations.
3.	Mechanics	1. Master end of sentence punctuation. 2. Develop skill in comma and apostrophe use. 3. Master skill in capitalization use. 4. Identify fragments and run-on sentences.
4.	Writing skills	1. Develop skill in composing thoughts prior to writing. 2. Identify complete sentences. 3. Compose complete sentences using basic sentence patterns. 4. Apply functional rules of punctuation in sentences. 5. Apply usage rules in specified writing assignments. 6. Compose complete sentences using basic sentence patterns. 7. Write dictated sentences. 8. Analyze reading materials for word choice and sentence variety. 9. Imitate sentence models of various lengths and styles. 10. Summarize printed materials. 11. Write personal responses to social issues.
5.	Communication Skills	1. Develop effective listening skills. 2. Develop the ability to speak extemporaneously. 3. Participate in class and small group discussion. 4. Participate in a group presentation.
6.	Copy editing	1. Further develop skill in analyzing written work for meaning. 2. Develop skill in editing for appropriate sentence

		punctuation. 3. Develop skill in editing for spelling errors.
7.	Career awareness	1. Explore career options. 2. Summarize career information. 3. Orally present information on a career area.
8.	Critical thinking	1. Gather appropriate information for a given assignment. 2. Distinguish fact from opinion in summarizing.
9.	Self direction	1. Assess personal attributes related to career choice. 2. Assess personal attributes of self-directedness.
10.	Social awareness	1. Identify social issues. 2. Personally respond to social issues. 3. Develop multi-cultural literacy.

COURSE OUTLINE

Language III

GENERAL OBJECTIVES

1. To enhance vocabulary development.
2. To enhance skill in sentence composing using correct grammar and mechanics.
3. To introduce paragraph composing.
4. To enhance oral communication skills.
5. To enhance confidence in the ability to self monitor and correct compositions.
6. To relate personal attributes to career options.
7. To further develop critical thinking skills related to communication.
8. To enhance self reflection, assessment, and awareness.
9. To develop the ability to participate in groups.

Number	Instructional Unit	Specific Objectives
1.	Vocabulary	1. Increase personal vocabulary. 2. Apply spelling rules to new words. 3. Identify career jargon. 4. Analyze word meanings using word parts, endings, and context clues. 5. Discuss approaches to vocabulary development in non-classroom situation. 6. Describe personal process of acquiring new words.
2.	Grammar	1. Chart functional patterns of sentences. 2. Identify subjects and predicates in various sentences (simple, compound, complex.) 3. Identify language elements in sentences (modifiers, phrases, etc.) 4. Apply correct usage in oral and written communication.

3.	Mechanics	1. Master skill in capitalization. 2. Correct punctuation errors. 3. Enhance skills in identifying fragments and run-on sentences.
4.	Writing skills	1. Enhance skill in composing thoughts prior to writing. 2. Demonstrate sentence variety in writing. 3. Construct clear, organized, and logical paragraphs. 4. Construct paragraphs from models of various lengths and styles. 5. Paraphrase printed materials. 6. Summarize printed materials. 7. Describe the process of writing (pre-writing, drafting, rewriting.) 8. Demonstrate the writing process.
5.	Communication skills	1. Develop effective listening skills. 2. Develop skill in oral reporting.
6.	Copy editing	1. Acquire skill in editing for supporting details. 2. Edit papers for mechanical errors.
7.	Career education	1. Analyze personal attributes related to career choice. 2. Describe worker profile in terms of requisite skills.
8.	Critical thinking	1. Distinguish central and supporting issues. 2. Gather appropriate information. 3. Distinguish fact from opinion in summarizing.
9.	Self direction	1. Assess mastery of sentence punctuation. 2. Assess composition skills for areas of strength or

		weakness.
10.	Social awareness	1. Relate personal concerns to broader social issues. 2. Enhance cultural literacy.

COURSE OUTLINE

Math I

GENERAL OBJECTIVES

1. To introduce basic number system concepts.
2. To develop a basic math vocabulary.
3. To develop computational skills.
4. To develop problem solving skills.
5. To evaluate careers in terms of prerequisite math skills.
6. To introduce critical thinking skills.
7. To develop self-directed learning skills.
8. To enhance social-awareness skills.

Number	Instructional Unit	Specific Objectives
1	Problem Solving	1. Identify information pertinent to the problem. 2. Determine if sufficient information is available to solve the problem. 3. Distinguish relevant from irrelevant information. 4. Generate appropriate questions. 5. Apply the correct operation. 6. Talk through the problem. 7. Describe the procedure used to solve the problem. 8. Show alternate methods for solving the problem. 9. Summarize the solution. 10. Analyze the solution for feasibility. 11. Transfer the technique used in one problem to a similar one.
2	Number Concepts	1. Recognize numerals to 1,000,000 2. Write numerals to 1,000,000. 3. Identify place value up to 1,000. 4. Round off numbers to 10, 100, 1000.
3	Vocabulary	1. Read and write the names of numbers (one through

		one hundred, thousand, million)
		2. Identify vocabulary used with word problems (product, sum, difference, quotient).
		3. Identify vocabulary used with fractions (part, whole).
		4. Identify vocabulary used with money (decimal point, currency names).
4	Whole Numbers	1. State the similarities and differences between the number facts.
		2. Demonstrate mastery of the 90 addition facts.
		3. Add up to three digits with two renamings.
		4. Demonstrate mastery of the 90 subtraction facts.
		5. Subtract up to three digits with two renamings.
		6. Develop skill in the 100 multiplication facts.
		7. Develop skill in multiplying two digit numerals.
		8. Develop skill in the 100 division facts.
		9. Develop skill in dividing two digit numerals.
5	Consumer Math	1. Count money, make change.
		2. Compute time - hours, minutes, seconds.
		3. Interpret time schedules.
		4. Interpret graphs and charts.
6	Technology	1. Use computer-aided instruction as available and appropriate.
		2. Introduce the use of calculator as an aid to computation.
7	Assess Progress	

7	Assess Progress	1. set attainable goals to be met in a given time limit. 2. Take responsibility for completing class assignments. 3. Participate in class discussions. 4. Evaluate class progress through: teacher or student made forms, written logs, goal sheets.
8	Decision Making	1. Develop responsibility for completing work in class during independent work time. 2. Work independently on materials covered in class. 3. Value daily review to better master math concepts. 4. Develop work projects to coincide with lessons in math.
9	Career Awareness	1. Identify careers available in math. 2. Apply math concepts to future career objectives. 3. Develop work habits and work-completion habits similar to those required in employment situations. 4. Describe the importance and prevalence of computers and related technology in our society.
14	Social Awareness	1. Work collaborative to write and solve word problems using socially relevant data/statistics. 2. Participate in class discussions - explaining or describing methods used to complete work or difficulties encountered. 3. Actively participate in study groups

to improve math skills.

4. Develop a sense of group responsibility through collaborative problem solving and peer tutoring.

COURSE OUTLINE
Math II

GENERAL OBJECTIVES

1. To introduce and develop number system concepts.
2. To develop an expanded math vocabulary.
3. To develop computational skills.
4. To develop problem solving skills.
5. To evaluate careers in terms of prerequisite math skills.
6. To introduce critical thinking skills.
7. To develop self-directed learning skills.
8. To enhance social-awareness skills.

Number	Instructional Unit	Specific Objectives
1	Problem Solving	1. Identify information pertinent to the problem. 2. Determine if sufficient information is available to solve the problem. 3. Distinguish relevant from irrelevant information. 4. Generate appropriate questions. 5. Apply the correct operation. 6. Talk through the problem. 7. Describe the procedure used to solve the problem. 8. Show alternate methods for solving the problem. 9. Summarize the solution. 10. Analyze the solution for feasibility. 11. Transfer the technique used in one problem to a similar one.
2	Number Concepts	1. Recognize numerals to 1,000,000. 2. Write numerals to 1,000,000. 3. Identify place value up to 1,000,000. 4. Round off numbers to 10, 100, 1000.
3	Vocabulary	1. Read and write the names of numbers (one through one

		hundred, thousand, million, also the fractional numbers).
		2. Identify vocabulary used with word problems (product, sum, difference, quotient).
		3. Identify vocabulary used with fractions (part, equal, numerator, denominator, factor, equivalent, etc).
		4. Identify vocabulary used with money (decimal point, currency names).
		5. Identify words used with consumer math functions (average, discount, etc.)
4	Whole Numbers	1. State the similarities and differences between the number facts.
		2. Demonstrate mastery of the 90 addition facts.
		3. Add up to four digits with three renamings.
		4. Demonstrate mastery of the 90 subtraction facts.
		5. Subtract up to four digits with three renamings.
		6. Demonstrate mastery of the 100 multiplication facts.
		7. Multiply four-digit numbers.
		8. Demonstrate mastery of the 100 division facts.
		9. Develop accuracy of long division using the four steps.
		10. Solve whole number word problems.
		11. Create whole number word problems.
5	Fractions	1. Describe the meaning and parts of fractions.
		2. Relate fractions to quantity (1/2, 1/3, 1/4, etc.).
		3. Locate common denominators.

		4. Convert fractions to higher or lower terms. 5. Find the L.C.M. of two whole numbers. 6. Reduce fractions. 7. Add, subtract, multiply and divide fractions, reducing when necessary. 8. Convert mixed numerals to fractions and vice versa. 9. Solve word problems using fractions. 10. Create word fraction word problems. 11. Develop skill in solving problems with mixed numbers.
6	Decimals	1. Recognize order and place value for money. 2. Add and subtract decimals as related to money. 3. Solve word problems with money. 4. Create word problems with money. 5. Introduce place value notation to thousandths position.
7	Consumer Math	1. Count money, make change. 2. Compute time - hours, minutes, seconds. 3. Interpret time schedules. 4. Interpret graphs and charts. 5. Compute averages. 6. Use maps related to travel. 7. Compute savings with coupons (not %). 8. Write checks, money orders, bank slips, etc.
8	Geometry	1. Recognize simple geometric figures. 2. Define and compute linear measures (length, width perimeter). 3. Use common devices for linear measurement.

		2. Recognize common percents of a quantity (half, quarter, third, etc.).
		3. Apply percents to consumer problems.
10	Technology	1. Use computer-aided instruction as available and appropriate.
		2. Introduce the use of calculator as an aid to computation.
11	Assess Progress	1. Set attainable goals to be met in a given time limit.
		2. Take responsibility for completing class assignments.
		3. Participate in class discussions.
		4. Evaluate class progress through: teacher or student made forms, written logs, goal sheets, etc.
12	Decision Making	1. Demonstrate responsibility for choosing activities in class during independent work time.
		2. Work independently on materials covered in class.
		3. Value daily review to better master math concepts.
		4. Develop work projects to coincide with lessons in math.
13	Career Awareness	1. Identify careers available in math.
		2. Apply math concepts to possible future job needs and skills as well as career objectives.
		3. Develop work habits and work-completion habits similar to those required in employment situations.
		4. Using math software, become familiar with computers as they are used in our society.

14	Social Awareness	1. Work collaboratively to write and/or solve word problems dealing with statistics related to social issues. 2. Participate in class discussions - explaining or describing methods used to complete work or difficulties encountered. 3. Actively participate in study groups to improve math skills. 4. Develop group-esteem through group problem solving and peer-tutoring.

COURSE OUTLINE

Math III

GENERAL OBJECTIVES

1. To further develop the number concepts.
2. To further increase math vocabulary and terminology.
3. To enhance computational and measurement abilities.
4. To acquire problem solving skills.
5. To attain a level of career awareness.
6. To apply critical thinking skills.
7. To engage in self-directed learning.
8. To cultivate a sense of social awareness.

Unit	Instructional Unit	Specific Objectives
1	Fractions	1. Add, subtract, multiply, and divide fractions and mixed numbers. 2. Solve problems involving addition, subtraction, multiplication and division of fractions. 3. Compare fractions. 4. Convert from mixed numerals to fractions and vice versa. 5. Find the least common multiple. 6. Simplify fractions. 7. Change one fraction into an equivalent fraction with a new denominator. 8. Learn the vocabulary of fractional notation.
2	Decimals	1. Identify place values for whole numbers and decimals. 2. Add, subtract, multiply, and divide decimals. 3. Solve problems involving addition, subtraction, multiplication and division of decimals. 4. Convert from fractional to decimal notation and vice versa. 5. Compare and round off decimals.

		6. Estimate sums, differences, products, and quotients by rounding off. 7. Learn the terminology of decimal notation.
3	Percents	1. Convert from fractional or decimal notation to percent notation or vice versa. 2. Translate percent problems into number sentences and solve. 3. Solve problems involving percent decrease or percent increase. 4. Solve consumer problems with percents. 5. Learn the vocabulary of percent notation.
4	Ratios and Proportions	1. Introduce the concept of ratio and proportions 2. Determine of two pairs of ratios are in proportion. 3. Solve problems using ratios and proportions. 4. Translate the concept of ratios and proportion into number sentences and solve. 5. Use the vocabulary associated with ratios and proportions.
5	Measurements	1. Convert from one English unit to another. 2. Find the area, perimeter and volume of basic geometric figures. 3. Solve measurement problems using geometric concepts. 4. Convert from Fahrenheit to Celsius scale and vice versa. 5. Use the vocabulary for geometric and measurement expressions. 6. Introduce metric units (not conversions).

6	Problem solving	1. Determine appropriate information needed to solve a problem. 2. Assess the relevance of information given. 3. Demonstrate individual and group problem solving skills. 4. Use systematic methods to analyze a problem. 5. Generate appropriate questions. 6. Apply the correct operation. 7. Talk the problem through. 8. Describe the procedure used to solve the problem. 9. Show alternate methods for solving the problem. 10. Summarize the solution. 11. Transfer the technique used in one problem to a similar one.
7	Decision Making	1. Evaluate personal progress in class. 2. Relate math skills to interest and values. 3. Take responsibility for learning. 4. Participate in discussions and group work. 5. Set attainable goals for learning. 6. Take responsibility for choosing learning activities during independent time in class. 7. Determine how to master material on a constant basis when out of class. 8. Develop work projects to coincide with lessons in math. 9. Apply systematic methods for effective study and test taking.
8	Career Awareness	1. Relate analytical and communication skills developed in math courses

		needed in future careers. 2. Develop work habits and work completion habits similar to those required in employment situations.
9	Social Awareness	1. Work collaboratively to write and/or solve word problems derived from news articles and other text concerning social issues. 2. Participate in class discussions -explaining or describing methods used to complete work, or discuss difficulties encountered. 3. Actively participate in study groups to improve math skills. 4. Feel a sense of comradery through group interaction and collaborative learning.

COURSE OUTLINE

Reading II

GENERAL OBJECTIVES

1. To continue building comprehension/metacognitive skills.
2. To continue building word knowledge.
3. To further develop study skills
4. To continue developing an understanding of career information.
5. To develop knowledge of critical thinking as it relates to the processing and communicating of information.
6. To develop self-directed learning abilities.
7. To continue exploring relationships of the individual to his/her various social groups.

Instructional Unit - Specific Objectives of Instructional Unit

Each instructional unit relates to a goal listed above and should NOT be taught in isolation. In the case of the Reading Core Instructional Units, the instructor should develop as many "teaching" units as he/she deems necessary to achieve the specific objectives. These "teaching" units will encompass elements of the Instructional Units of word knowledge, comprehension skills, and study skills.

Number	Instructional Unit	Specific Objectives
1.	Metacognitive Skills	1. Assess background knowledge. 2. Establish a purpose for reading. 3. Predict content of text. 4. Recognize relationships between elements of text. 5. Monitor comprehension 6. Regulate reading according to purpose and difficulty. 7. Use graphic organizers. 8. Develop several question/answer strategies. 10. Summarize text material. 11. Combine background knowledge and text material

		to make inferences. 12. Utilize various pre-reading, during and post-reading strategies.
2.	Word Knowledge	1. Demonstrate acquisition of increased basic sight vocabulary knowledge through speaking and writing. 2. Recognize basic structural elements: word family, base, affix, compound word. 3. Use basic phonics knowledge to unlock new words: consonants, vowels, sound variations, syllables. 4. Use basic dictionary skills to pronounce words and learn meanings.
3.	Study skills	1. Develop school-life survival skills a. Identify present reading strengths and weaknesses. b. Set appropriate reading goals based on results of this identification. c. Evaluate the degree to which reading skills are being achieved. d. Develop time management techniques: schedules, committed time, leisure time, and study time. e. Know school resources: library, librarian, advisor, counselor, and registrar. 2. Locate word information by using the dictionary guide words, entry words, pronunciation key, speech parts, and meanings. 3. Use lower-level reference materials: books, pamphlets, encyclopedias,

		card catalog. 4. Interpret basic maps, graphs, and tables. 5. Use a teacher-guided basic study method with content-related materials. 6. Use a basic teacher-guided note-taking system. 7. Paraphrase sentences. 8. Generate simple questions at all cognitive levels. 9. Identify test-taking strategies.
4.	Career Awareness	1. Determine the difference between a job and a career. 2. Identify various careers and occupations. 3. Relate various skills, strengths, weaknesses, and values to occupational areas. 4. Identify resources which can lead to employment. 5. Develop short-range goals leading to a future occupational objective.
5.	Critical thinking	1. Understand directions or purpose of a task. 2. Perceive task as "do-able." 3. Identify pertinent information. 4. Distinguish fact from opinion. 5. Assess consistency of information. 6. Decide on problem solving method.
6.	Self-direction- Instructor guided	1. Set attainable goals for self. 2. Monitor time use for efficiency. 3. Enhance success through individual and group decision making. 4. Take responsibility for decisions and the resulting consequences. 5. Monitor need for immediate gratifications.

		6. Examine skills and relate to life and career choices. 7. Relate schooling to life.
7.	Social awareness	1. Through reading of immediate and relevant social concerns: -Identify local community groups. -Identify stages of group process. -Identify roles in group process. -Identify role of communication in the group process. -Identify a social issue and its effect on racially/ethnically diverse communities.

COURSE OUTLINE
Reading III

GENERAL OBJECTIVES

1. To further enhance comprehension/metacognition skills
2. To continue building word knowledge.
3. To continue developing study skills.
4. To continue developing an understanding of career information.
5. To develop knowledge of critical thinking as it relates to the processing and communicating of information.
6. To develop self-directed learning abilities.
7. To continue exploring relationships of the individual to his/her various social groups.
8. To enhance the ability to appreciate life in a multicultural community.

1.	Metacognitive Skills	1. Assess background knowledge. 2. Establish a purpose for reading. 3. Predict content of text. 4. Recognize relationships between elements of text. 5. Monitor comprehension 6. Regulate reading according to purpose and difficulty. 7. Use graphic organizers. 8. Develop several question/answer strategies. 9. Summarize text material. 10. Combine background knowledge and text material to make inferences. 11. Utilize various pre-reading, during and post-reading strategies. 12. Identify basic textbook structures and their relationship to narrative and expository comprehension. 13. Recognize reflection as an aid to comprehension and retention. 14. Relate learned knowledge and experience to new information.
2	Word Knowledge	1. Demonstrate expansion of

		general and specialized sight vocabulary through speaking and writing.
		2. Review/extend use of structural analysis skills to include derivations and inflections.
		3. Extend basic phonics knowledge to include stressed syllables and decoding generalizations.
		4. Use general contexts (article, chapter, book) and local contexts (sentence, syntactic cues, semantic cues, graphophonic cues).
		5. Develop dictionary skills to identify general and precise meanings, multiple meanings, synonyms, antonyms, and homonyms.
		6. Relate direct and vicarious experiences to the written word.
		7. Identify basic textbook structures and their relationship to comprehension.
		8. Identify the relationship between graphics and the related text.
		9. Recognize reflection as an aid to comprehension and retention.
		10. Relate learned knowledge and experience to new information.
3.	Study Skills	1. Identify academic-life survival strategies. See CO I level.
		2. Identify parts of the dictionary.
		3. Use reference materials including indexes.
		4. Interpret more complex maps, graphics, and tables.
		5. Compare two study systems

	with teacher guidance. 6. Use a note-taking system semi-independently. 7. Use a summarizing strategy with teacher guidance. 8. Generate progressively complex questions at all levels of the cognitive domain. 9. Use test-taking strategies.
4. Career education	1. Use a variety of resources to explore careers/occupational areas. 2. Recognize occupational classifications and clusters. 3. State the requirements of entry-level jobs and various occupational programs. 4. Assess personal skills, strengths, weaknesses,and values, and relate to various occupations. 5. Specify short-range goals leading to a job or academic occupational objective.
5. Critical Thinking Skills	1. Understand directions or purpose of a task. 2. Perceive the task as "do-able". 3. Identify information pertinent to a problem. 4. Relate past experience to new information. 5. Define terminology related to the problem or task. 6. Judge the information in a number of ways: fact/opinion,objective/subjective, consistent/discrepant. 7. Plan a problem solving task concluding strategy. 8. Solve the problem or draw conclusions from the task. 9. Summarize the problem/conclusion with

		teacher guidance.
6.	Self-Directed Learning	1. Set attainable goals for self. 2. Monitor time use. 3. Enhance success through individual and group decision making. 4. Take responsibility for decisions and resulting consequences. 5. Monitor need for immediate gratifications. 6. Critically examine present skills and relate to life and career choices. 7. Relate schooling to life experiences.
7.	Social Responsibility	1. Identify local community information resources. 2. Recognize obstacles to information gathering in the local community. 3. Identify strategies to remedy communication barriers and breakdowns. 4. Recognize various coping styles of handling conflict. 5. Observe a problem-solving group within the neighborhood, school, community, and/or city. 6. Use the group process to discuss solutions and recommendations in solving the observed problem. 7. Actively participate in group processes by taking various roles. 8. Analyze the communication process within the group setting. 9. Identify diverse subcultures in the community.
8.	Multicultural Awareness	1. To recognize positive aspects of personal cultural background.

2. To recognize biases and stereotypes.
3. To establish trust with divergent cultural groups.
4. To value cultural diversity.

BIBLIOGRAPHIES

BIBLIOGRAPHY ON THEORY AND PEDAGOGY

Abiola, E.T. The nature of intellectual development in Nigerian children. Teacher Education, February 1964, VIII.

Ada, Alma Flor. Whole language approach to creative reading and writing. San Francisco, CA: 1988.

Ada, Alma Flor. Parent teacher cooperation in the language development of students. San Francisco, CA: 1985.

Ada, Alma Flor. La ensenanza bilingue a la poblacion hispanica de los Estados Unidos: condiciones presentes, posibilidades futuras. San Francisco, CA: 1984.

Ada, Alma Flor. El lenguaje es al base. San Francisco, CA: 1984.

Ada, Alma Flor. Correlacion entre el desarrollo linguistico y la lectura. San Francisco, CA: 1984.

Ada, Alma Flor. Creative writing and literacy workshop guide (Field Test Edition). San Francisco, CA: 1983

Ada, Alma Flor. Metodo de lecto-escritura. Bogota, COLOMBIA: 1983.

Ada, Alma Flor. Creative reading: A new approach to teaching ethnic minority students to read. San Francisco, CA: 1980.

Ada, Alma Flor. No one learns to read twice: The transfer-ability of reading skills. San Francisco, CA: 1980.

Adamopekum,N.D. University curriculum and national needs. West Africa Journal of Education , 1964, VIII.

Adams, D. & Bjork, R.M. Education in developing areas.New York: David McKay Company, Inc., 1972

Alverman, D.E., Dillon, D.R. & O'Brien, D.G. Using discussion to promote reading comprehension. International Reading Association, 1987.

Amoroso, H.C. Conversations with a new literate. Journal of Reading, March 1986

Anderson, B., Nitzke, S., Pingue, S. & Voichick, J. Readers' responses to language experience approach materials. Adult Literacy and Basic Education. II (1), 1987.

Anderson, C.A. & Bowmen, M.J. (Eds.) Education and economic development. Chicago: Aldine Publishing Co, 1965.

Anderson, R. The notion of schemata and the educational enterprise. In R. Anderson, R. Spiro & W. Montague (Eds.) Schooling and

the acquisition on knowledge. Hillsdale, NJ:Erlbaum, 1976.

Apple, M. Ideology and curriculum. London: Routledge & Kegan Paul, 1979.

Ausubel, D. The use of advance organizers in the learning and retention of meaningful verbal material.Journal for Educational Psychology, 51.

Ausubel, D. Educational psychology: A cognitive view. New York: Holt, Rinehart and Winston, 1968.

Axtell, J.L. The educational writings of John Locke. London: Cambridge University Press, 1968.

Baldwin, J. If Black English isn't a language, then tell me, what is? New York Times, July 29, 1979.

Baron, D.E. Grammar and good taste. New Haven: Yale University Press, 1982.

Beder, H. & Valentine, T. Iowa's Adult Basic Education students: Descriptive profiles. Iowa Department of Education, 1987.

Bliatout, B.T. , Downing, B.T., Lewis, J. & Yang, D. A handbook for teaching Hmong-speaking students. Folson Cordova Unified School Districts, Southeast Asia Community Resource Center.

Bowles, S. & Gintis, H. Schooling in capitalist America. New York: Basic Books, 1976.

Brett, R.J. Hungry for education: An American teacher reports on south of the Sahara. American Teacher Magazine, 45, 1960.

Brodeck, M. Toward a fabric of knowledge - common elements among fields of learning. The Education Record. July 1962.

Brookes, G.H. Exploring the world through reading and writing. Language Arts, 65 (3),1988.

Brown, A., Campione, J. & Day, J. Learning to learn: on training students to learn from texts. Educational Researcher, 10.

Buckley, J. A blueprint for better schools. U.S. News and World Report.104 (2), 1988.

Budz, S. I've kept my secret too long. Redbook, 169, October 1987.

Carbo, M. Deprogramming reading failure: Giving unequal learners an equal chance. Phi Delta Kappan, November 1987.

Carin, A. & Sund, R. Teaching science through discovery. Columbus: Merrill, 1985.

Carnegie Forum on Education and the Economy. A nation prepared: Teachers for the 21st century. New York: L. Branscomb, Chairman, 1986.

Cheng, L.R.L. Assessing Asian Language Performance. Aspen Publishers, Inc., 1987

Combs, A. What the future demands. Phi Delta Kappan. 42(1), 1981.

Cowan, L. G., et al (Eds.) Education and Nation Building in Africa. New York: Frederick A. Praeger, 1963.

Craik, R. & Lockhart, R. Levels of processing: A framework for memory research. Journal of Verbal Learning and Verbal Behavior. 11. 1972.

Cremin, L.A. The transformation of the schools. New York: Vintage Books, A Division of Random House, 1961.

Cummins, Jim. Bilingualism and special education:Issues in Assessment and Pedagogy. Clevendon: Multicultural Matter, Ltd.

Dalavingette, R. Christianity and colonialism. New York: Hawthorne Books, 1964.

Davis, R.S. & Davis, G.S. Grouping students for effective learning in the ABE classroom. Lifelong Learning.

Derbyshire, R.L. The sociology of exclusion: Implications for teaching adult illiterates. Adult Education. Autumn 1966.

Dewey, J. Experience and Education. New York: Collier, 1938.

Dooling. D. & Mullet, R. Locus of thematic effects in retention of prose. Journal of Experimental Psychology. 97, 1973.

DuBois, N. Alverson, G., & Staley, R. Educational psychology and instructional decisions. Homewood, IL: Dorsey, 1979.

Duke, D. Helping teachers manage classrooms. Alexandria, VA: Association for Supervision and Curriculum Development, 1983.

Dunn, R., Beaudry, J. & Klavas, A. Survey of research on learning styles. Educational Leadership. Alexandria, VA; Association for Supervision and Curriculum Development. 46(6), March 1989.

Elbow, P. Writing without teachers. New York: Oxford University Press, 1973.

Emeruwa, H.N. Education in Igboland: A Proposal for the development of effective Ibo culture-oriented system, unpublished Dissertation, Indiana University, 1970.

Engelson, D. A guide to curriculum planning in environmental education. Madison, WI: Department of Public Instruction, 1985.

Ferguson, C.A. & Health, S.B. Language in the USA. Cambridge: Cambridge University Press, 1982.

Ford, P. Principles and practices of outdoor environmental education. New York: Wiley & Sons, 1981.

Fingeret, A. Social network: A perspective on independence and illiterate Adults. Adult Education Quarterly. 33,(3), Spring 1983.

Frank, F.W. & Treichler, P.A.Language, gender and professional writing: Theoretical approaches and guidelines for nonsexist usage. New York: Modern Language Association, 1989.

Frankenstein, M. Relearning maths: A different third R -- Radical Maths. London: Free Association Press, 1989.

Freire, P. Pedagogia del oprimido. Santiago de Chile, 1974.

Freire, P. Pedagogy in Process: Letters to Guinea Bissau. Seabury Press, 1978.

Freire, P. The people speak their word:Learning to read and write in Sao Tome and Principe. Harvard Educational Review. 15 (1), 1981.

Galland, C. Chalk it up to experience. Outside. 13(1), 1987.

Gere, A.R. & Smith, E. Attitudes, language and change. Urbana: National Council of Teachers of English, 1979.

Gilmer, G. International Study Group on Ethnomathematics (ISGSM) Newsletter. 4(2), May 1989.

Glasser, W. Schools without failure. New York: Harper and Row, 1969.

Goodman, K. & Goodman, Y. Whole language comprehension centered reading programs. Arizona Center for Research and Development, University of Arizona, February 1981.

Grant, C. & Sleeter, C. Turning on learning: Five approaches for multicultural teaching plans for race, class, gender and disability. Columbus, Ohio: Merrill Publishing Co., 1989.

Green, M.M. Ibo Village Affairs. New York: Frederick A. Praeger, 1964.

Grier, W. Black Rage. New York: Bantam, 1968.

Hale-Benson, J. Black children: Their roots, culture and learning styles. Baltimore, MD: John Hopkins University Press, 1982.

Hammerman, D. and Hammerman, W. Teaching in the outdoors. Minneapolis: Burgess, 1973.

Harman, D. & St.John Hunter, C. Adult illiteracy in the United States. New York: McGraw Hill, 1985.

Hardt, U.H. (Ed.). Teaching reading with the other language arts. International Reading Association, 1983.

Heimlich, J.E. & Pittleman, S.D. Semantic mapping: classroom applications. International Reading Association, 1977.

Hirschfelder, A. American Indian stereotypes in the world of children:A reader and bibliography . Metuchen, NJ: The Scarecrow Press, 1982.

Hoffman, P. What is the undeveloped world in education and the development of nations.In Hanson & C.S. Brembeck, New York: Holt, Reinhart and Winston, 1966.

Hvitfeldt, C. Traditional culture, perceptual style and learning: The classroom behaviors of Hmong adults. 36,(2), 1986.

Iloga, E. Christianity and Ibo culture. Leiden, Netherlands: E.J. Brills, 1974

Illich, I. Deschooling society. New York: Harper and Row, 1970.

Institute for the Study of adult literacy. Adult literacy services: Planning options for library involvement, Library Trends, Spring 1968

Isenberg, M. Education comes alive outdoors. NEA Journal. 56, 1967.

Jacobs, R.L. An investigation of the learning style differences among Afro-American and Euro-American high, average and low achievers. Doctoral dissertation, Peabody University Press, LA.

Jalali, F.A. A cross-cultural comparative analysis of the learning styles and field dependence/independence characteristics on selected fourth, fifth and sixth grade students of Afro, Chinese, Greek and Mexican American heritage. Doctoral dissertation, ST. John's University, NY).

Katz, J. (Ed.) Teaching as though students mattered. NY: Jossey-Bass, 1985.

Kenyatta, J. Facing Mt. Kenya. London: Heinemenn, 1979.

King,K.N. Mediate and Educate, Lifelong Learning, September, 1987.

Kirsen & Guthrie. The concept and measurement of functional literacy, Reading Research Quarterly. 13(4), 1977-78.

Kochman, T. Black and white styles in conflict. Chicago: University of Chicago Press, 1981.

Kozol, J. Prisoners of Silence. NY: Continuum, 1980.

Kramarae, C., Schulz, M. & O'Barr, W.M. Language and power. Beverly Hills, CA: Sage, 1984.

Kuczma, P. Physics of an amusement park. Science Teacher. 44, 1977.

Labov, W. Objectivity and commitment in linguistic science: The case of the Black English trial in Ann Arbor, Language in Society, II, 1982.

Lam-Phoon, S. A comparative study of the learning styles of southeast Asian and American caucasian college students of two Seventh-Day Adventist campuses, 1986.

Lawing, B.S. Solving mathematical word problems. Albany, NY: Delmar, 1983.

Leonard, G. The silent pulse. New York: Dutton, 1986.

Lerner, D. The passing of traditional society. NY: Free Press, 1958.

Lindemann, E. The meaning of adult education. NY: New Republic, 1926.

Littman, M. The people. Salt Lake City, UT: Hansen Planetarium, 1976.

Long, T. Basic mathematics skills and vocational education. Ohio State University, Ohio: National Center for Research in Vocational Education, 1980.

Manual del alfabetizador: Instituto Nacional para la Educacion de los Adultos. Mexico, D.F., Mexico: Talleras Graficos de la Nacion.

McKenzie, G., Utgard, R. & Lisowski, M. The importance of field trips. Journal of College Science Teaching. 16(1), 1986.

Michaels,L. & Ricks, C. The state of language. Berkley,CA: University of California, 1980.

Midwest Materials Development Center. Metodo URESBA. Milwaukee, WI, 1976.

Midwest Materials Development Center. Plan de curriculo. Milwaukee,

WI, 1976.

Miles, M.B. Learning to work in groups. NY: Teachers College Press, 1971.

Milwaukee Urban League. Milwaukee today, a racial gap study. 1987.

More, A.J. Native learning styles: A review for researchers and teachers. Journal of American Indian Education (special issue), 29, 1989

Morris, W. & M. Dictionary of contemporary usage. NY: Harper & Row, 1985.

Mullen, W. No Place Called Home. Chicago Tribune, October 10, 1988.

Murray, V.A. The school in the bush. London: Longmans, Green and Company, 1929.

National Science Board Task Committee on Undergraduate Science and Engineering Education. Undergraduate science, mathematics and engineering education. Washington, D.C.: National Science Foundation, 1986.

Norman, C. & Malicky, G. Literacy as a social phenomenon: Implications for instruction, Lifelong Learning, 9, May 1986.

Northrup, D. The growth of trade among the Igbos before 1800. Journal of African History, XIII (2), 1972.

Nwagbaraocha, V. I. Education in Nigeria 100 to 1970's: Problems and prospects in the development of vocational and technical education in the former Eastern Nigeria, unpublished dissertation, Marquette University, Milwaukee, WI, 1978.

Okorie, K. Chance to read in Eastern Nigeria, Library Journal, 85, 1960.

Ortiz, S. The People Shall Continue. San Francisco: Children's Book Press, 1977.

Padak, N. & Padak, G. Guidelines and a holistic method for adult basic reading programs, Journal of Reading, March 1987.

Peters, R. Authority, responsibility & education. NY: Altherton Press, 1970.

Quandt, I. Self concept & reading. International Reading Association, 1973.

Rexroth, K. The alternative society. NY: Herder & Herder, 1970.

Rifkin, J. The declaration of a heretic. Boston: Routledge & Kegan Paul., 1985.

Rillo, T. Basic consideration for outdoor education. The communicator, 1976.

Robbins, C. The Ravens. NY: Crown Publishers, 1987.

Rosenstein, F. Outdoor Education - there's something in it for everyone. The Communicator, 1976.

Rousseau, J. Emile. In W. Boyd (Ed.) The Emile of Jean Jacques Rousseau, NY: Columbia University, 1956.

Sashett & Sepmeter. Educational Systems of Africa. CA: University of California Press, 1966.

Schwartz, B. The practice of affirmative education. In B. Schwartz (Ed.), Affirmative Education. Englewood Cliffs, NJ: Prentice Hall, 1972.

Scribner, S. Literacy in three metaphors. American Journal of Education, 1984.

Seitz, V. Social class and ethnic group differences in learning. International Reading Association, 1977.

Shor, I. Critical teaching and everyday life. Boston: South End Press, 1980.

Silberman, C. Crisis in education. NY: Random House, 1970.

Sims, J.E. Learning styles: A comparative analysis of the learning styles of Black American, Mexican-American and white-American third and fourth grade students in traditional public schools. 1988.

Sledd, J. Bi-dialectalism: The linguistics of white supremacy. English Journal, December 1969.

Smitherman, G. Talkin and testifyin: The language of Black America. Detroit, MI: Wayne State University, 1977/1986.

Stedman, R. Shadows of the Indian: Stereotypes in American culture. Norman, OK: University of Oklahoma Press, 1982.

Story, L. Field courses still have educational merit. AMCBT Bioscene. 13(2), 1987.

Students' right to their own language. Special issue of College Composition and Communication. Urbana, IL: National Council of Teachers of English, 1974.

Swanson, D. The Hmong in America. National Geographic, October 1988.

Swisher, K. and Dehyle, D. The styles of learning are different but the teaching is just the same: suggestions for teachers of American Indian youth, Journal of American Indian Education (special issue). 29, August 1989.

Talbot, P.A. Tribes of the Niger Delta, NY: Barnes and Noble, Inc., 1967.

Thistlewaite, L. The adult disabled learner - An independent learner. Lifelong Learning, Nov. 1983.

Thompson, J. Adult education and the disadvantaged, Convergence, XVI(2), 1983

Thornton, L. J. Basic reading skills and vocational education, Ohio: The National Center for Research in Vocational Education at Ohio State University, 1980.

Vance, D. Frontloading. Reading Today, 6(1), 1988.

Vazques, A.W. Descriptions of learning styles of high-risk adult students taking courses in urban community colleges in Puerto Rico. Doctoral Dissertation, The Union of Experimental Colleges and Universities, PR.

Ward, W.E.F. Educating young nations. London: Allen and Union, 1961.

Wiggins, G. Creating a thought-provoking curriculum. American Educator, 11(4), 1987.

Williams, J. They train lions, don't they? Journal of Teacher Education. 33(3), 1982.

BIBLIOGRAPHY ON DIVERSITY AND LEARNING

Ada, A. F. (1980). Creative reading: A new approach to teaching ethnic minority students to read.

Alvarez, R. (1973). The unique psycho-historical experience of Mexican American people. in R. Rosaldo, R. Calvert, G. Seligmann, Eds. Chicano: the evolution of a people. Minneapolis: Winston Press.

Alzaga, F. (1977-1978). The three roots of Cuban heritage, Agenda, 9-10, 22-26.

Andrade, A.R. (May 1990). Latino students: Struggle for identity, Latino Studies Journal, 48-59.

Anzaldua, G. (1987). Borderlands/ La Frontera. San Francisco: Spinsters, 55-64.

"Boost Black Students the Old-Fashioned Way," (June 21, 1989) The Wall Street Journal

Brandt, R. (October 1990). On learning styles: A conversation with Pat Guild, Educational Leadership, p. 10-13.

Cohen, R. (1969). Conceptual styles, culture conflict and non-verbal tests of intelligence, American Anthropologist, 71, 828-56.

Cohen, R., Fraenkel, G. & Brewer, J. (1968). The language of the hard core poor: Implications for culture conflict. Sociology Quarterly, 10, 19-28.

Cortes, C.E. (1977-1978). The Chicanos- a frontier people, Agenda 9-10, 16-20.

Cummins, J. (1989). Empowering Minority Students, Sacramento: California Association for Bilingual Education.

Grier. W. (1968). Black Rage. New York: Bantam.

Hale-Benson, J.E. (1982). Black children: Their roots, culture and learning styles. Baltimore: Johns Hopkins University Press.

Havighurst, R. J. (1976). The relative importance of social class and ethnicity in human development. Human Development, 19, 56-64.

Hernandez, J. (January 1990). Latino alternatives to the underclass concept, Latino Studies Journal, 95-105.

Lara-Braud, J. (1973). Bilingualism for Texas: Education for fraternity, R. Rosaldo, R. Calvert & G. Seligmann, Eds. Chicano: The evolution of a people. Minneapolis: Winston Press.

Little Soldier, E. (October 1989). Cooperative learning and the Native American student, Phi Delta Kappan.

Liss, S.B. & Liss, P.K. (1972). Man, State and Society, NY: Praeger.

Marable, M. (August-September 1990). The rhetoric of racial harmony, Sojourners, 19, 14-18.

Marshall, C. (October 1990). The power of learning styles philosophy, Educational Leadership, 62.

McCarthy, B. (October 1990). Using the 4MAT system to bring learning styles to schools, Educational Leadership, 31-36.

Moore, J. (May 1980). Hispanic/Latino: Imposed label or real identity, Latino Studies Journal.

Morner, M. (1978). The impact of regional variety on the history of the Afro-Latin Americans, Secolas, IX, 1-7.

Muñoz, R. (1985). Oppression and identity in Latin American literature, Secolas, XVI.

Ogbu, J.U. (1978). Minority education and caste. NY: Academic Press.

O'Neil, J. (October 1990). Making Sense of Style. Educational Leadership, 4-9.

Paz, O. (1973). The Pachuco and other extremes in R. Rosaldo, R. Calvert & G. Seligmann, Eds. Chicano:the evolution of a people, Minneapolis: Winston Press.

Perez, Louis A. (1990). Transition: Cuba, Spain and the United States, 1878-1898. Secolas, XXI, 79-87.

Perrin, J. (October 1990). The learning styles project for potential dropouts, Educational Leadership, 23-24.

Picon-Salas, M. (?) The Initial Encounter in Liss & Liss (1972) Man, State and Society in Latin Americas, NY: Praeger.

Retamar, R. F. (1971). Caliban and other essays in Casa de Las Americas, 68.

Sanchez, G. I. (1973). Pachucos in the making in R. Rosaldo, R. Calvert & G. Seligmann, Chicano: the evolution of a people.

Minneapolis: Winston Press.

Seitz, V. (1977). Social class and ethnic group differences in learning to read, International Reading Association.

Stodolsky, S.S. & Lesser, G.S. (1967) Learning patterns in the disadvantaged, Harvard Educational Review, 37, 546-593.

Uribe, O. (1977-1978). The impact of 25 years of school desegregation on Hispanic students, Agenda, 9-10, 18-19, 30.

Vivo, P. (1977-1978). The Puerto-Ricans - two communities, one culture, Agenda, 9-10.

BIBLIOGRAPHY FOR MULTICULTURAL MATHEMATICS TEACHING

A Study of Exemplary Mathematics Programs (Final Report). Chelmsford, MA: Northeast Regional Exchange. (1985).

Adler, J. (1988). Newspaper-based mathematics for adults in South Africa. Educational Studies in Mathematics, 19, (2).

Anderson, J.A. (1988). Cognitive styles and multicultural populations. Journal of Teacher Education, 39, 2-9.

Banks, J.A. (1988) Ethnicity, class, cognitive and motivational styles: Research and teaching implications. Journal of Negro Education, 57, 452-466.

Begle, E. G. (1975, March). Test factors, instructional programs, and socio-cultural economic factors related to mathematics achievement of Chicano students: a review of the literature. Palo Alto,CA: Standford Mathematics Education Group, Stanford University.

Bishop, A.J. (1988). Mathematics education in its cultural context. Educational Studies in Mathematics, 19, (2).

Bland, L. (1974). Visual perception and recall of school-age Navajo, Hopi, Jicarilla Apache and Caucasian children of the Southwest. Unpublished PH.D. dissertation. University of New Mexico, Albuquerque, NM.

Boykin, W. (1986). The triple quandry and the schooling of Afro-American children. In U. Neisser (Ed.), The school achievement of minority children: New perspectives. (pp. 169-189). Hillsdale, NJ: Lawrence Erlbaum Associates.

Bracey, G.W. (1988). Culture, psychology, biology and mathematics achievement. Phi Delta Kappan, vol. 525-527.

Brown, T. (1987). Issues in 'multi-ethnic education." Mathematics Teaching, 120, 8-10.

Charbonneau, M.P. & John-Steiner, V. (1988). Patterns of experience and the language of mathematics. In R. Cocking & J. Mestre (Eds.), Linguistic and cultural influences on learning mathematics. Hillsdale, NJ: Lawrence Erlbaum Associates.

Cheek, H.N. (1984). Increasing the participation of Native Americans in mathematics. Journal for Research in Mathematics Education, 15, 107-113.

Chipman, S.F. & Thomas, V.G. (in press). The participation of women and minorities in mathematical, scientific and technical fields. Review of Research in Education, 14.

Clements, M.A. (1989). Mathematics for the minority. Victoria: Deakin University.

Cobb, P. (1986). Contexts, goals, beliefs and learning mathematics. For the Learning of Mathematics, 6(2), 2-9.

Cocking, R. & Chipman, S. (1988). Conceptual issues related to mathematics achievement of language minority children. In R. Cocking & J. Mestre, (Eds.) Linguistic and cultural influences on learning mathematics. Hillsdale, NJ: Lawrence Erlbaum Associates.

Cohen, E.G, Intili, J. & DeAvila, E.A. (1982). Learning science in bilingual classrooms (Final Report to National Science Foundation Grant #SED 80-14079). Stanford, CA: Standford University, School of Education.

Cohen, R.A. (1969). Conceptual styles, culture conflict and nonverbal tests of intelligence. American Anthropologist, 71, 828-856.

Cole, M & Griffin, P. (1987). Contextual factors in education - improving science and mathematics education for minorities and women. Madison, WI: Wisconsin Center for Education.

Connolly, P. & Vilardi, T. (1989). Writing to learn mathematics and science. NY: Teachers College Press.

Cooking, R.R. & Mestre, J.P. (Eds.) (1988). Linguistic and cultural influences on learning mathematics. Hillsdale, NJ: Lawrence Erlbaum Associates.

Creswell, J.L. ( ). Sex related differences in mathematics achievement of Black and Chicano adolescents. Unpublished paper.

Croom, L. (1984). The Urban Project: A model to help minority students prepare for mathematics-based careers. Journal for Research in Mathematics Education, 15, 172-176.

Cuevas, G.J. (1984). Mathematics learning in English as a second language. Journal for Research in Mathematics Education, 15, 134-144.

D'Ambrosio, U. (1985). Ethnomathematics and it place in the history and pedagogy of mathematics. For the learning of mathematics, 5, (1).

D'Ambrosio,U. (1987). Reflections on ethnomathematics. International Study Group on Ethnomathematics Newsletter, 3, (1).

DeAvila, E.A. (1988). Bilingualism, cognitive function, and language minority group membership. In R. Cocking & J. Mestre

(Eds.), Linguistic and cultural influences on learning mathematics. Hillsdale,NJ: Lawrence Erlbaum Associates.

Denker, E. (1977, April). Teaching numeric concepts to Spanish-speaking second graders: English or Spanish instruction? Paper presented at American Educational Research Association, New York.

Duran, R. (1985). Influences of language skills on bilinguals' problem solving. In S.F. Chipman, J. Segal & Glaser, R. (Eds.) Thinking and learning skills (Vol. 2, pp. 187-202). Hillsdale, NJ: Lawrence Erlbaum Associates.

Duran, R. P. (1988). Bilinguals' logical reasoning aptitude: A construct validity study. In R. Cocking & J. Mestre, (Eds.), Linguistic and cultural influences on learning mathematics. Hillsdale, NJ: Lawrence Erlbaum Associates.

Eccles, J.S. & Jacobs, J.E. (1986). Social forces shape math attitudes and performance. Signs, 11.

Englehard, G. (1990). Gender differences in performance on mathematics items: Evidences from the United States and Thailand. Contemporary Educational Psychology, 15, 13-26.

Ernest, P. (1988). The social context of mathematics teaching. Exeter, England: University of Exeter. ED302434.

Fehr, F.S. (1969). Critique of hereditarian accounts. Science, Heritability and IQ, (Serial No. 4).

Fennema, E.H. & Sherman, J.A. (1977). Sex-related differences in mathematics achievement, spatial visualization and affective factors. American Educational Research Journal, 14, (1).

Fennema, E.H. (1974). Mathematics learning and the sexes: A review. Journal of Research in Mathematics Education, May.

Finn, G.P.T. (1987). Multicultural racism and Scottish education. Scottish Educational Review, 19(1), 39-49.

Fox, L.H. (1977). The effects of sex role socialization on mathematics participation and achievement. In Women and mathematics: Research perspectives for change (Papers in Education and Work, no.8). Washington, D.C.: National Institute of Education.

Fox, L.H., Brody, L. & Harrop, I.M. (1979). Women and mathematics: The impact of early intervention programs upon course-taking and attitudes in high school. (Final report). Washington, D.C.: National Institute of Education.

Frankenstein, M. (1990) Incorporating race, gender, and class issues into a critical mathematical literacy curriculum.

Journal of Negro Education, 59, (3).

Frankenstein, M. (1989). Relearning mathematics: A different kind of third "R" - Radical maths. London: Free Association Books.

Frankenstein, M. & Powell, A.B. (1989). Empowering non-traditional college students. Science and Nature, 9/10.

Gallego, T.A. (1980). Language and culture in the mathematics curriculum of the 1980's: Issues affecting Spanish bilingual students. In Salient issues in mathematics education research for minorities. Proceedings from a National Institute of Education sponsored meeting. Washington, D.C.: National Institute of Education (ERIC ED191699).

Gallegos, T. (1979). A methods course for the bilingual elementary school mathematics teacher. Dissertation Abstracts International, 39 (11), 6603A.

Garbe, D.G. (1985). Mathematics vocabulary and the culturally different student. Arithmetic Teacher, 33(2), 39-42.

Garcia, J. (1988). Minority participation in elementary science and mathematics. Education and Society, 1, (3)

Gerdes, P. (1988). On culture, geometrical thinking and mathematics education. Educational Studies in Mathematics, 19, (2).

Gerdes, P. (1988). A widespread decorative motif and the pythagorean theorem. For the learning of mathematics, 8, (1).

Gerdes, P. (1988). On possible uses of traditional Angolan sand drawings in the mathematics classroom.Educational Studies in Mathematics, 19, (1).

Gill, T. etal (1987). Teaching Mathematics, Volume II: Strategies in Mathematics. Washington, D.C.: Institute for Independent Education.

Ginsburg, H. (1981). Social class and racial influences on early mathematical thinking. Monographs of the Society for Research in Child Development, 46, (6, serial no. 193).

(1981). The development of knowledge concerning written arithmetic: A cross-cultural study. International Journal of Mathematics Education and Science Technology, 18, 573-579.

(1986). The myth of the deprived child: New thoughts on poor children. In U. Neisser (Ed.), The school achievement of minority children: New Perspectives (pp.169-189). Hillsadale, NJ: Lawrence Erlbaum Associates.

Green, R. (1978). Math avoidance: A barrier to American Indian

science education and science careers. BIA Educational Research Bulletin, 6.

Griffin, J.B. (1990). Developing more minority mathematicians and scientists: A new approach. Journal of Negro Education. 59, (3).

Hannan, A. (1988). Should math be multicultural? Mathematics in School, 17, (1).

Harris, J. (1987). Australian aboriginal and islander mathematics. Australian Aboriginal Studies, 2, 29-37.

Hemmings, R. (1984). Mathematics. In A. Craft & G. Bardell (Eds.), Curriculum opportunities in a multicultural society (pp. 113-131). New York: Harper and Row.

Hopkins, P. (1989). Women, minorities and the private sector in science and mathematics education - a review of the literature. Austin: Austin Independent School District Office of Research and Evaluation.

Hudson, B. (1987a). Global and multicultural issues. Mathematics Teaching, 119, 52-55.
(1987b). Multicultural mathematics. Mathematics in School, 16, (4).

Johnson, M.L. (1984). Blacks in mathematics: A status report. Journal for Research in Mathematics Education, 15, 145-153.

Johnson, S. & Prom-Jackson, S. (1983). Factors related to science and mathematics career choice in a minority population: A survey of alumni for A Better Chance, Inc. Final report submitted to the Ford Foundation, Inc.

Jones, J. A. (1990). Look at math teachers - not "Black English" Washington, D.C.: Institute for Independent Education, Inc.

Jones, L. (1989). Mathematics and Islamic art. Mathematics in School, 18 (4), 32-35.

Jones, L.V., Burton, N.W. & Davenport, E.C. (1984). Monitoring the mathematics achievement of black students. Journal for Research in Mathematics Education, 15, 154-164.

Joseph, G. (1987). Foundations of Eurocentrism in mathematics. Race and Class, 28(3), 13-28.

Keene, F. (1978). Fundamental algebra and some characteristics of high risk students. Paper presented at the Conference on the Problem of Math Anxiety, California State University, Fresno, CA.

Keitel, C. (1987). What are the goals of mathematics for all?

Journal of Curriculum Studies, 19, 203-217.

Lappan, G. (1988). Research into practice: Gender and race equity in primary and middle school mathematics classrooms. Arithmetic Teacher 35, (8).

Lea, H. (1987). Traditional mathematics in Botswana. Mathematics Teaching, 119, 38-41.

MacCorquodale, P.L. (1984). Social influences on the participation of Mexican-American women in science (Final report). Washington, D.C.: National Institute of Education. (ERIC ED234991).

MacCorquodale, P.L. (1983). Mexican Americans and mathematics: Aptitudes, attitudes and aspirations. Unpublished paper.

MacCorquodale, P.L. (1986). Self-image, science and math: Does the image of the "scientist" keep girls and minorities from pursuing science and math? Sex Roles.

MacCorquodale, P. (1988). Mexican-American women and mathematics: participation, aspirations and achievement. In R. Cocking & J. Mestre (Eds.), Linguistic and cultural influences on learning mathematics. Hillsdale, NJ: Lawrence Erlbaum Associates.

Malcolm, S.M. etal. (1984). Equity and Excellence: Compatible Goals - an assessment of programs that facilitate increased access and achievement of females and minorities in K-12 Mathematics and Science education. Washington, D.C.: American Association for the Advancement of Science.

Mathematics/Science Educational Policy Seminar Papers. New York: City University of New York. (1986).

McCormick, T.E. (1986). Multicultural education and competency testing: Conflicts and consequences. Urban Education, 8, 31-42.

Mellin-Olsen, S. (1987). The politics of mathematics education. Boston: D. Reidel.

Mestre, J.P. & Robinson, H. (1983). Academic, socioeconomic and motivational characteristics of Hispanic college students enrolled in technical programs. Vocational Guidance Quarterly, 31.

Mestre, J.P., Gerace, W.J. & Lochhead, J. (1982). The interdependence of language and transnational math skills among bilingual Hispanic engineering students. Journal of Research in Science Teaching, 19.

Moore, C.G. (1988a). Mathematics-like principles inferred from the

petroglyphs. Journal of American Indian Education, 27(2), 30-36.

(1988b). The implications of string figures for American Indian mathematics education. Journal of American Indian Education, 28(28), 16-26.

Moore, E.G.J. & Smith, A.W. (1985). Mathematics aptitude: Effects of coursework, household language and ethnic differences. Urban Education, 20.

Morning, C. Mullins, R. & Penick, B. (1980). Factors affecting the participation and performance of minorities in mathematics. New York: Ford Foundation.

Myers, D.E. & Milne, A.M. (1983). Mathematics achievement of language-minority students. Prepared for Part C of the Math and Language Minority Students Project, National Institute of Education.

Myers, D.E. & Milne, A.M. (1988). Effects of home language and primary language on mathematics achievement: A model and results for secondary analysis. In R. Cocking & J. Mestre (Eds.), Linguistic and cultural influences on learning mathematics. Hillsdale, NJ: Lawrence Erlbaum Associates.

Myers, D.E. & Milne, A.M. (1982a). Mathematics opportunity and exposure: Language minority status and gender. Prepared for Part C of the Math and Language Minority Students Project, National Institute of Education.

National Academy of Sciences (1989). Everybody counts - a report to the nation on the future of mathematics education. Washington,)D.C.: National Academy Press.

Native American Science Education Association. (1986, Winter). Mathematics of Native American games of chance. KUI TATK.

National Council of Teachers of Mathematics. (1984). Multicultural Mathematics Posters and Activities. Reston,VA: NCTM.

National Research Council (1989). Everybody counts: A report to the nation on the future of mathematics education. Washington, D.C: National Academy Press.

Ng, K.M. & Tsang, S.L. (1980, April). Mathematical cognitive structures of Chinese American, Euro-American, and Hong Kong Chinese students. Paper presented at the meeting of the American Educational Research Association, Boston.

Nichols, E.J. etal (1986). Teaching Mathematics, Volume I: Culture, motivation, history and classroom management. Washington, D.C.: Institute for Independent Education.

Noss, R. (1988). The computer as a cultural influence in mathematical learning. Educational Studies in Mathematics, 19, (2).

Orr, E.W. (1987). Twice as less - Black English and the performance of black students in mathematics and science. NY: W.W. Norton and Company.

Ortiz-Franco, L. (1980). First glances at language and culture in mathematics education. Unpublished manuscript, National Institute of Education, Washington, D.C.

Patterson, R. (1990). Helping minority students with limited mathematics skills to succeed. Black Issues in Higher Education, 27 (2), 30-36.

Presmeg, N.C. (1989). Visualization in multicultural mathematics classrooms. Focus on Learning Problems in Mathematics, 11, (1-2).

Presmeg, N.C. (1988). School mathematics in culture conflict situations. Educational Studies in Mathematics, 19, (2).

Rendon, L.I. (1983). Mathematics education for Hispanic students in the Border College Consortium. Laredo, TX:Laredo Junior College, Border College Consortium.

Reyes, L. H. (1980). Attitudes and mathematics. In M.M. Lindquist (Ed.) Selected issues in mathematics education (pp. 161-184). Evanston, IL: National Society for the Study of Education and National Council of Teachers of Mathematics.

Saxe, G.B. (1983). Culture, counting and number conservation. International Journal of Psychology, 18, 313-318.

Saxe, G.B. & Posner, J. (1983). The development of numerical cognition: Cross-cultural perspectives. In H. Ginsburg (Ed.), The development of mathematical thinking (pp.291-315). New York: Academic.

Schindler, D.E. & Davison, D.M. (1985). Language, culture and the mathematics concepts of American Indian learners. Journal of American Indian Education. 24(3), 27-34.

Schlieman, A.D. (1984). Mathematics among carpentry apprentices: Implications for school teaching. In P. Damerow, M.E. Dunkley, B.F. Nebres & B. Werry (Eds.), Mathematics for all. (pp.92-94). Paris: UNESCO.

Schwartz, W. (1988). Teaching science and mathematics to at-risk students. Equity and Excellence. 4, (5).

Scott, P. (1986, September). Review of Learning, aboriginal world view and ethnomathematics by Robert P. Hartung. "Have you

seen...." International Study Group on Ethnomathematics, (2).

Secada, W.G. (1990). The challenges of a changing world for mathematics education. Teaching and learning mathematics in the 1990's. NCTM 1990 Yearbook. Reston, VA: National Council of Teachers of Mathematics.

Sells, L. (1980). The mathematical filter and the education of women and minorities. In. L.H. Fox, L. Brody & D. Tobin (Eds.), Women and the mathematical mystique. Baltimore,MD: The John Hopkins University.

Serna, D.A. (1980). Issues affecting bilingual education in elementary education. In Salient issues in mathematics education research for minorities. Proceedings from a National Institute of Education sponsored meeting. (ERIC ED191699).

Smith, G. Lantz, A. (1981). Factors affecting the participation of minorities in nonrequired mathematics courses. In G. Smith, A. Lantz & V.L.Eaton (Eds.), Factors influencing the choice of non-required mathematics courses. Denver,CO: Denver Research Institute, Social Systems Research and Evaluation Division.

Stanfield-Potworowsky, J. (1988). Socializing mathematics. Mathematics Teaching, 125, 3-8.

Stanic, G.M.A. & Reyes, L.H. (1987). Excellence and equity in mathematics classrooms. For the learning of Mathematics, 7(2), 27-31.

Stiff, L.V. & Harvey, W.B. (1988). On the education of black children in mathematics. Journal of Black Studies, 19, 190-203.

Stugler, J.W. & Baranes, R. (1988). Culture and mathematics learning. In E.Z. Rothkopf (Ed.) Review of research in education: Vol. 15 (pp.253-306). Washington, D.C. :American Educational Research Association.

Tobias, S. (1978). Overcoming math anxiety. New York: Norton.

Tooley, J. (1990). Multicultural mathematics, underachievement and the national curriculum. Mathematics in School, 19(2), 10-11.

Treisman, P.U. (1985). A study of mathematics performance of black students at the University of California, Berkeley. Berkeley, CA: University of California.

Tsang, S.L. (1984). The mathematics education of Asian Americans. Journal for Research in Mathematics Education, 15, (2).

Tsang, S.L. (1976). The effects of the language factor and the cultural content factor of mathematics achievement tests on Chinese and Chicano students (Doctoral dissertation, Stanford University). Dissertation Abstracts International, 37, 714A.

Tsang, S.L. (1983). Mathematics learning styles of Chinese immigrant students (Final research report). Oakland, CA: ARC Associates.

Valverde, L.A. (1984). Underachievement and under representation of Hispanics in mathematics and mathematics -related careers. Journal for Research in Mathematics Education, 15.

(1984). Hispanic students and mathematics. In Helen Cheek (Ed.)Handbook for conducting equity activities in mathematics education. Reston, VA: National Council of Teachers of Mathematics.

Walker, A. D. (1984). Teaching the turtle - sociological implications of computer education for women and minorities. Paper presented at the Association for Educational Communications and Technology, Dallas, TX.

Wallace, J. (1986). Nurturing an 'I Can' Attitude in Mathematics. Equity and Excellence. 2, (2).

Watson, H. (1987). Learning to apply numbers in mathematical learning. Educational Studies in Mathematics, 18, (4).

Woodrow, D. (1984). Cultural impacts on children learning mathematics. Mathematics in School, 13, (5).

Zaslavsky, C. (1973). Africa counts: Number and pattern in African culture. Boston: PWS Publishers.

(1988). Integrating mathematics with the study of cultural traditions. Paper presented at the International Conference on Mathematical Education, Budapest, ED303540